

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Philip Morris International Inc. (PMI) is a leading international tobacco company. PMI has its executive headquarters in New York, US, its primary listing on the New York Stock Exchange (NYSE: PM), and its Operations Center in Lausanne, Switzerland. PMI manufactures and sells cigarettes, smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside of the U.S. We have a wide range of cigarette brands, including the world's best-selling international cigarette Marlboro. Our smoke-free product portfolio includes heat-not-burn and nicotine-containing vapor products. In 2020, PMI net revenues amounted to USD 28.7 billion excluding excise taxes on products worth USD 47.4 billion, on a like-for-like basis; 23.8% of PMI's net revenues in 2020 related to the sale of smoke-free products. PMI's 2020 total shipment volume for combustible products and smoke-free products was 730 billion (654 billion combustible products and 76 billion smoke-free products).

We are building our future on smoke-free products that are a much better consumer choice than continuing to smoke cigarettes. Our vision is that these products ultimately replace cigarettes to the benefit of adult smokers, society, our company and our shareholders. This ambition is at the very core of our corporate strategy and sits atop our sustainability priorities. For PMI, sustainability is an opportunity for innovation, growth, and long-term value creation, and a means to minimize the negative externalities associated with our products, operations, and value chain while maximizing operational efficiency and resource allocation. We have a global footprint: as of December 31, 2020, PMI had a workforce of close to 71,000 people worldwide and operated 39 production facilities globally. In 2020, our tobacco was sourced from over 285,900 contracted farmers across 23 countries, and our products were sold in over 175 markets.

Our sustainability materiality analysis helps us prioritize our focus where we can have the greatest impact. Climate protection, littering prevention and product eco-design and circularity are tier 1 environmental topics that are prioritized in our sustainability strategy.

Engagement beyond our own operations is key, as this is where the most significant sustainability impacts occur, especially when it comes to climate change and carbon emissions.

Our business has a significant, global supply chain organized by five main categories:

1. Agricultural products, including tobacco and other agricultural products, such as clove, menthol and guar gum.
2. Direct materials used to produce cigarettes and other tobacco products, such as acetate tow (for cigarette filters) and paper (both cigarette paper and for packaging materials).
3. Machines for our cigarette and heated tobacco products factories.
4. Electronic devices for heated tobacco and vapor products.
5. Goods and services that are not specific to the tobacco business, but essential for any business, such as office equipment etc.

As a responsible business, we want to understand and continuously address potential sustainability issues in our global supply chain. We are working with business partners to proactively identify, manage, and reduce risks, and create shared value. The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2020 and 2021 Proxy Statement dated March 25, 2021, filed with the U.S. Securities and Exchange Commission, and the full text of PMI's Integrated Report 2020.

Remarks for this disclosure, in this submission:

- "PMI," "we," "us" and "our" refer to Philip Morris International Inc. and its subsidiaries;
- Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of PMI Inc. and are italicized;
- Expectations, aspirational targets and goals set forth in this submission do not constitute financial projections;
- Smoke-Free Products or Reduced-Risk Products (RRPs) - the terms PMI uses to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. PMI has a range of RRP's in various stages of development, scientific assessment and commercialization;
- Materiality: In this submission and in related communications, the terms "materiality," "material" and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.
- Unless otherwise indicated, the scope of the data in this report covers our operations worldwide for the full calendar year 2020 or reflects the status as of December 31, 2020. Where not specified, data come from PMI estimates.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Albania
Algeria
Argentina
Armenia
Australia
Austria
Bangladesh
Belgium
Bosnia & Herzegovina
Brazil
Bulgaria
Canada
Chile
China
China, Hong Kong Special Administrative Region
China, Macao Special Administrative Region
Colombia
Costa Rica
Croatia
Curaçao
Czechia
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Finland
France
Georgia
Germany
Greece
Guatemala
Hungary
India
Indonesia
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kuwait
Lebanon
Lithuania
Malawi
Malaysia
Mexico
Morocco
Mozambique
Netherlands
New Zealand
Nicaragua
Nigeria
North Macedonia
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Republic of Korea
Republic of Moldova
Réunion
Romania
Russian Federation
Senegal

Serbia
 Singapore
 Slovakia
 Slovenia
 South Africa
 Spain
 Sri Lanka
 Sweden
 Switzerland
 Taiwan, Greater China
 Thailand
 Tunisia
 Turkey
 Ukraine
 United Arab Emirates
 United Kingdom of Great Britain and Northern Ireland
 United States of America
 Uruguay
 Venezuela (Bolivarian Republic of)
 Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Yes [Consumption only]

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Do not own/manage land

Please explain

We don't own the tobacco farms or the land that supply us with tobacco leaf, but the farmers who run them are a crucial part of our economic, environmental, and social footprint. We are working directly with them and our suppliers to promote sustainable farming and climate change mitigation initiatives as part of our Good Agricultural Practices (GAP) program.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity

Tobacco

% of revenue dependent on this agricultural commodity

More than 80%

Produced or sourced

Sourced

Please explain

100% of PMI heated tobacco units, cigarettes and other nicotine-containing products require tobacco

Agricultural commodity

Timber

% of revenue dependent on this agricultural commodity

More than 80%

Produced or sourced

Sourced

Please explain

100% of PMI heated tobacco units, cigarettes and other nicotine-containing products require timber derivative products. Additionally, PMI uses board and paper for packaging of the majority of PMI's products.

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	PMI's Board of Directors (BoD) and its Committees, incl. the Nominating and Corporate Governance Committee (NCGC) and Audit Committee of the BoD, are responsible to foster the long-term success of the company incl. setting broad corporate policies, strategic direction, and overseeing management, which is responsible for daily operations. The BoD considers that environmental, social and governance (ESG) factors, including climate change, are relevant to the company's business and long-term success. As an example of climate-related decision-making process in 2020, the BoD and its Committees approved the company's annual budget and received updates on the company's performance and targets against the budget throughout the year. The annual budget factors in resources required to deploy GHG emission initiatives to achieve our carbon neutrality goal. Additionally, in early 2020, PMI's BoD released PMI's Statement of Purpose, which acknowledges that certain key stakeholders (e.g. employees, investors, customers, civil society) are fundamental to its business transformation toward a smoke-free future. PMI focuses to protect the environment through sustainable practices across its business and to address both existing social and environmental challenges pertaining to its business transformation. As part of these initiatives, PMI works towards lowering carbon emissions as a core element of PMI's sustainable corporate strategy and decision-making processes. As PMI's transition to a smoke-free future will require more energy to produce heated tobacco units compared to cigarettes and it could result in increased GHG emissions, it is important to reduce this potential impact through effective projects. Since 2018, the BoD mandated the NCGC of the Board, composed of 5 BoD members in 2020, and at the time of the 2021 proxy statement publication, to oversee PMI's sustainability strategies and performance, including to provide recommendations to executive management on climate change-related issues, and on a set of initiatives aiming at actively reduce potential negative impacts of our business on the environment. PMI's Integrated Report 2019—that constitutes the main external communication of PMI on sustainability performance, including regarding climate change—was completed with the support of PMI's Board of Directors and extensively reviewed by its Executive Chairman.
Board-level committee	In 2020, the Audit Committee of the Board, composed by 6 Board of Director members, at the time of the publication of the 2021 proxy statement, oversees the assessment and management of the company risks including to provide recommendations to executive management on those related to climate change such as natural disasters, water scarcity and agricultural instability, which may lead to increased pressure on natural resources and conflict with other users, affect our direct operations and/or our supply chain, and thus potentially impacting PMI's ability to operate.

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Board of Directors (BoD) oversees PMI's full range of activities including establishing broad corporate policies setting strategic direction, and overseeing management. The BoD is responsible for the day-to-day operations of the company and takes into account climate-related issues as part of their oversight process. Part of the BoD's oversight is focused on management's efforts to enhance shareholder value responsibly and sustainably. The BoD believes that environmental factors, including those related to climate change, social, and governance (ESG) factors are relevant to the company's business and important to PMI's long-term success. Those factors are part of the responsibility of the Board and considered in the evaluation of the annual performances of the company and its management. The BoD approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year including those related to the achievement of sustainability and climate change targets. The BoD has established various standing Committees to assist with the performance of its responsibilities and is regularly informed on future plans, and significant issues affecting the business, including the climate-related ones. The BoD meets typically 6 times per year with additional meetings held as necessary. The BoD is advised on climate change-related issues by the Nominating and Corporate Governance Committee of the BoD, which oversees the Company's sustainability strategies and performance. The committee met 4 times in 2020. The BoD oversees the management of risks relating to the Company's business. Risk oversight is conducted both by Committees of the BoD as well as by the full BoD. Management has identified and prioritized a number of key enterprise risks and, as part of the risk management process, has established a Corporate Risk Governance Committee ("CRGC") that comprised in 2020 the COO, the CFO, and other members of our Company Management and senior leaders from relevant functions. Management reports on these risks to the appropriate Committee and to the full Board when appropriate. The Company conducted a full-scale reassessment of the strategic enterprise risk management program in 2018, assigned ownership of each of the prioritized risks to a member of Company Management, and the oversight of their management to a particular Board Committee; the same ownership assignments continued in 2020. The Audit Committee of the BoD was assigned to oversee the management of climate change prioritized risk as it could result in natural disasters, water scarcity, agricultural instability, which may impact PMI's ability to operate; the Committee met 8 times in 2020. A member of the Company Management, the Senior Vice President Operations, was tasked with the responsibility to address the climate change risk, including physical climate and water related risks.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (Senior Vice President, Operations)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other, please specify (Sustainability Committee)	<Not Applicable>	Other, please specify (Overseeing PMI's sustainability work)	<Not Applicable>	Annually
Chief Sustainability Officer (CSO)	<Not Applicable>	Other, please specify (Leading the integration of sustainability, including environmental topics, across PMI.)	<Not Applicable>	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

A member of the Company Management (CM), the Senior Vice President Operations (SVP Operations) has been tasked with responsibility to address climate change risks and opportunities across the company's activities, including physical climate, and transition risks. As of May 5, 2021, our SVP Operations reports directly to PMI's Chief Executive Officer (CEO) and the position of the Chief Operating Officer (COO) no longer exists. SVP Operations is delegated with operational responsibility, including maintaining robust business resiliency, risk assessment processes, and strategies to support business continuity. Our SVP Operations is responsible to ensure that climate change risks and opportunities are assessed, managed, monitored, integrated into long-range plan and budget review process, and reported to the appropriate Committee and the full Board throughout the year. PMI's SVP Operations is strategically positioned within the company's structure to be able to effectively engage the Board and specific departments on climate issues. For this reason, he was assigned with responsibility to address climate change risks that could impact PMI's ability to operate such as natural disasters, water scarcity, change in weather patterns and agricultural instability, which are considered during the annual Integrated Risk Assessment (IRA) process.

SVP Operations holds the responsibility that climate-related issues are integrated into normal business activities; this forms part of our annual Long-Range Planning process which reviews and sets business direction, objectives and performance appraisal process. In 2020, the strategy was developed/reviewed based on prior year performance, sustainability commitments and objectives, regulatory/external developments, risk/opportunity assessments, stakeholder interest and business changes, through functional management teams up to our CM.

CM provided the Board with insights on the reassessment process throughout 2020. SVP Operations leads the Operations Sustainability function reporting directly to him, which drives environmental strategies and their full integration into the business, due to the strategic importance of climate-related issues within our operations. He receives updates on progress towards objectives and their achievement, in monthly meetings with the Operations Management Team reporting to him, and during quarterly functional reviews of the Operations Sustainability function.

In 2020, SVP Operations reported to PMI's COO, also a member of PMI's CM who reported to the CEO. The COO was updated regularly on climate change issues by the SVP Operations as they may impact PMI's ability to operate and effectively addressing these risks is critical to the achievement of PMI's strategic objectives. In 2020, the COO and SVP Operations were the highest management level responsible for climate-related issues. They were both responsible for monitoring and reviewing PMI's objectives, strategies, and action plans related to climate change with the CEO, and they reported their findings to the Nominating and Corporate Governance Committee (NCGC) and Audit Committee of the BoD."

The Sustainability Committee – composed of the company's CEO, CFO, Senior VP Operations, and other members of the CM – meets quarterly to review and validate PMI strategy, commitments, goals, progress, and annual reporting.

PMI's sustainability strategy is shaped by a formal sustainability materiality assessment, which was updated in 2019, re-prioritizing the most relevant sustainability topics for PMI. To help manage these topics from a global and sustainability perspective, within our CM, members are responsible for driving progress and delivering on our sustainability targets within their respective functions (e.g. mitigate climate change decarbonizing our value chain to SVP Operations).

PMI's CSO reports to our CFO and leads the strategy of integration of the most relevant sustainability topics, as prioritized based on PMI sustainability materiality assessment and including climate-related issues, across our business. PMI's CSO heads and manages PMI's Corporate Sustainability Team, reports on progress to the Sustainability Committee on a quarterly basis and updates the Board of Directors at least once a year.

From an operational perspective, our Operations Sustainability and Corporate Sustainability functions coordinate the company's climate change-related activities. Most of the coordination takes place in the context of sustainability working groups and with local market coordinators. This helps ensure that our global strategies and programs are monitored, assessed and implemented down to the market level and that local realities are reflected in our global efforts.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Company performance against a climate-related sustainability index	PMI's compensation and benefits program supports business and financial objectives, including the achievement of sustainability efforts. PMI has defined strategic priorities, among which to drive material and measurable progress in priority sustainability corridors. Operating with excellence and protecting the environment are strategic pillars of PMI sustainability strategy, covering tier 1 topics such as sustainable supply chain management and climate protection. PMI's BoD approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year. The BoD considers that environmental, social and governance (ESG) factors, including climate change as relevant to the company's business and long-term success. These factors are part of the responsibility of the Board and are considered in its evaluation of the annual performance of the company and its management. The Compensation and Leadership Development Committee of PMI's BoD more clearly reflected the Company's commitment to having sustainability at the core of its corporate strategy in the Company's executive compensation program. Progress against the strategic priorities is included in our compensation program, for the management group (i.e., corporate executive team incl. CEO) and other eligible employees. Executive management covering sustainability, including ESG topics, are specifically appraised each year for performance against targets, including those relating to climate change e.g. emissions reduction target. Towards the end of the year PMI assesses progress towards its sustainability targets as the threshold of success, therefore rewards are provided if progress is either linear to the overall target or exceeding a linear trend over the reporting year. These indicators were selected as they are aligned with the company's vision and they allow PMI to objectively quantify the progress of the company in the field of climate change and sustainability. We discuss our executive compensation program in more detail in our proxy statement filed with the U.S. Securities and Exchange Commission.

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target Company performance against a climate-related sustainability index	PMI's compensation and benefits program supports business and financial objectives, including the achievement of sustainability efforts. PMI has defined strategic priorities, among which to drive material and measurable progress in priority sustainability corridors. Strategic pillars of PMI sustainability strategy cover tier 1 topics including sustainable supply chain management and climate protection. PMI's BoD approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year. The BoD considers that environmental, social and governance (ESG) factors, including climate change as relevant to the company's business and long-term success. These factors are considered in its evaluation of the annual performance of the company and its management. Accordingly, progress against the strategic priorities is included in our compensation program for the management group and other eligible employees. Executive management covering sustainability, including ESG topics, are specifically appraised each year for performance against targets, including those relating to climate change e.g. emissions reduction target and environmental leadership. The assessment of ESG results (which includes annual performance against our carbon footprint reduction targets and target to maintain CDP Triple A score) directly influences the annual performance rating of our SVP Operations and certain members of the company executive management team. Towards the end of the year PMI assesses progress towards its sustainability targets as the threshold of success, therefore rewards are provided if progress is either linear to the overall target or exceeding a linear trend over the reporting year. These indicators were selected as they are aligned with the company's vision and they allow PMI to objectively quantify the progress of the company in the field of climate change and sustainability.
Management group	Monetary reward	Emissions reduction target	PMI's compensation and benefits program supports business and financial objectives, including the achievement of sustainability efforts. In its transformation towards a smoke-free future, PMI has defined strategic priorities, which embed our operational sustainability efforts to build global societal support for RRP. Operating with excellence and protecting the environment are strategic pillars, covering tier 1 materiality topics such as sustainable supply chain management and climate protection. In PMI the Board of Directors (BoD) approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year. The BoD considers that environmental, social and governance (ESG) factors, including climate change as relevant to the company's business and long-term success. These factors are part of the responsibility of the Board and are considered in its evaluation of the annual performance of the company and its management. Accordingly, these results are included in our overall performance rating which determines the cash bonuses for the management group and other eligible employees. Management group covering sustainability, including EHS topics are specifically appraised each year for performance against targets, including those relating to climate change e.g. emissions reduction target. The assessment of EHS results (which includes annual performance against our carbon footprint reduction targets) directly influences the annual performance rating of Management group including for example the Chief Procurement Officer (CPO) and its business unit managers. This covers the annual cash incentive compensation elements for those roles. For example, specifically to Chief Procurement Officer, sustainability including climate-related issues is one of the top five objectives the variable compensation of our CPO is determined upon.
Chief Sustainability Officer (CSO)	Monetary reward	Behavior change related indicator Company performance against a climate-related sustainability index	Our CSO, is responsible for driving Sustainability, including climate-related issues, across the organization: all functions and markets. This covers behavioral change towards sustainability, including those relating to climate change, within the company Company's commitment to having sustainability at the core of its corporate strategy is part of our CSO mandate, which include to improve PMI's ESG performance. CSO is incentivized against a set of predefined objectives, which include the company's performance in key ESG ratings that also cover environmental-related matters (incl. climate-related issues).
Buyers/purchasers	Non-monetary reward	Environmental criteria included in purchases	Tobacco leaf volume allocation depends, among other factors, on the performance of leaf suppliers that includes Good Agricultural Practices (GAP) program implementation as well as achievement of strategic initiatives targets such as carbon footprint reduction. If leaf suppliers in a region or a market perform well, the buyer responsible for this region/market will not be limited by GAP underperformance in his purchase options, and this would not influence the achievement of his annual objectives and therefore his performance evaluation.
Energy manager	Monetary reward	Energy reduction target	Managers and team members have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all of our manufacturing facilities.
Environment/Sustainability manager	Monetary reward	Energy reduction target	Managers and team members have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all of our manufacturing facilities.
Procurement manager	Monetary reward	Supply chain engagement	Procurement managers have energy carbon footprint engagement targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal.
All employees	Monetary reward	Other (please specify) (Climate change mitigation projects)	Specific company awards such as the CEO Award and Recognition for Excellence Awards, which are either cash or stock, are available for Energy Managers, EHS Managers, project teams and other employees who are responsible for climate change related initiatives and improvements.
All employees	Monetary reward	Emissions reduction project	Specific company awards such as "Above and Beyond the Call of Duty" (ABCD) awards for best practice initiatives in the areas of climate change, energy and carbon reduction.
All employees	Non-monetary reward	Behavior change related indicator	Annually many affiliates continue to perform voluntary awareness and promotion campaigns/programs in order to increase employees' active participation in Sustainability programs and to make carbon footprint reduction part of the company's culture. Awards and recognition for best practices form a core element of such campaigns.
Other, please specify (Operations employees (the largest business unit within PMI, around 20,000 employees))	Non-monetary reward	Emissions reduction project Energy reduction project Efficiency project Supply chain engagement	Operations employees also have the opportunity to earn awards for best practice initiatives in the areas of climate change, energy and carbon emission reduction. This forms part of our Operations Department ABCD Award and "Lead, Lean and Learn" program which encourages innovation, continuous improvement and employee engagement.
Other, please specify (Employees in our Operations Center)	Monetary reward	Behavior change related indicator	Employees from the Operations Center are encouraged to use public transportation. The annual fee for half-price railway subscription as well as a monthly public transport allowance is paid by the company for those employees who choose to use public transportation rather than commute in their private cars to work, contributing to reduce our carbon emission footprint.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	We evaluate short-term profits and losses as part of our annual financial reporting.
Medium-term	1	5	Our annual Long-Range Planning process reviews and sets business direction over a 3 to 5-year horizon. Despite being called PMI's Long-Range Plan, it equates to "medium-term" in CDP terminology.
Long-term	5	15	The physical risks of climate change have the potential to materially impact our business. Therefore, we have conducted climate risk assessments with 2030 time horizon. We chose this time horizon because it is hard for climate models to be more granular and to accurately interpret the data in a longer period.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Alongside physical impacts such as rising sea-levels and changing weather patterns, there are transition risks such as new carbon-related regulations and taxes, changes in manufacturing technology and evolving consumer preferences, which can affect business units or the organization due to stakeholder or customer concerns. Being at the forefront of addressing the global challenge of climate change also presents opportunities. Some correlate to good practices such as energy-use reduction and the protection of forests and waterways; others arise through product eco-design and adaptation measures. PMI, alongside many of its suppliers, is working within a context of stabilizing the global temperature rise to below the internationally agreed 1.5-degree Celsius scenario. We understand the potential impacts of climate change across all areas of our operations, particularly upstream in our supply chain.

The climate crisis, as acknowledged by the international community, threatens livelihoods, in particular the most vulnerable people around the world. It impacts human population movement, biodiversity, access to water, global health, food security, and other environmental changes such as soil degradation and desertification. Beyond its human repercussions, climate change could threaten business continuity. This is especially the case for businesses involving an agricultural supply chain. For PMI, costs of raw materials such as tobacco leaf and cloves may rise, and both consumers and our employees are becoming increasingly sensitized to the environmental impact of corporate actions. Upfront expenditures with longer-term returns are required. At the same time, PMI's efforts to reduce its GHG emissions, such as through increased energy efficiency, could alleviate potential costs and create a competitive advantage by meeting or exceeding the expectations of consumers, employees, and other stakeholders.

A substantive financial or strategic impact can vary depending on which of the above aspects of the business are considered as impacted and the potential combination of them. The level of criticality will have different threshold when comparing, for example, impact within our agricultural supply chain (engagement with hundreds of thousands of farmers) and the development of new products or the compliance with regulations on carbon emissions in our factories. Therefore, in PMI, as explained in the below paragraph, we refer to a variety of factors that independently or in combination may affect the achievement of our smoke-free vision.

PMI evaluates a "substantive impact" (e.g.: financial or strategic impact) based on a variety of factors and quantitative indicators including but not limited to the potential impact on financial performance as well as other strategic factors that may affect PMI's efforts and/or delivery towards a smoke-free future, ultimately replacing cigarettes with smoke-free products. The impacts reported as substantive strategic or financial impacts are defined as those identified and prioritized by management in our value chain, through key enterprise risks based on four risk dimensions: the impact a risk could have on the organization if it occurs, the likelihood a risk will occur, the velocity with which a risk would affect the organization if it occurs, and the interconnectivity of a risk with other risks, that exceed defined thresholds at the corporate level.

As part of the Company's annual Integrated Risk Assessment (IRA) process, we have in place an extensive risk control program by which we assess the climate change physical risks. Specifically, in our operations, locations with values exceeding \$30 million range are surveyed by engineers from our property insurer, who provide recommendations to us on the magnitude of environmental risks, for example risk of flooding that could cause reduction or disruption in production capacity in specific locations, and the cost of management. Recommendations for risk management are given if the expected reduction in the financial impact of the risk exceeds the cost to meet the recommendations by a factor of 10 or more. Internally, we focus on recommendations above the \$50 million range as management of identified risks can involve substantial capital investment and disruption to operations including our supply chain.

In 2020+ risk forecasting terms, in relation to our tobacco supply chain, we assumed as substantive risks those with a potential impact in excess of \$5 million or a raw material impact in excess of 1000 metric tons of tobacco leaves. This definition is applicable to PMI's agricultural supply chain.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

PMI has an interconnected three-step assessment process to identify, assess and manage risks and opportunities that can have a substantive financial or strategic impact on the company's operations. Substantive strategic or financial impacts are defined as those identified and prioritized by management in our value chain, through key enterprise risks based on four risk dimensions: the impact a risk could have on the organization if it occurs, the likelihood a risk will occur, the velocity with which a risk would affect the organization if it occurs, and the interconnectivity of a risk with other risks, that exceed defined thresholds at the corporate level. E.g., in 2020+ risk forecasting terms, in relation to our tobacco supply chain, we assumed as substantive risks those with a potential impact in excess of \$5M or raw material impact in excess of 1000 metric tons of tobacco leaves. This process takes place every year, covering short, medium- and long-term time horizons. Each step involves multiple stakeholders and results in different types of actions: 1) Strategic Enterprise Risks (SER) management - The SER is PMI's highest-level risk and opportunity assessment process which is conducted by both the Committees of the Board with respect to their areas of responsibility as well as by the full Board. To identify and assess climate-related risks, PMI Company Management (CM) has identified and prioritized key enterprise risks based on four risk dimensions as mentioned above: impact, likelihood, velocity and interconnectivity. The SER covers a wide range of topics that are relevant to PMI's value chain such as environmental, economic, geopolitical, technological and societal ones. PMI CM conducts a reassessment of SER on a yearly basis. Ownership of each of the prioritized risks is assigned to a member of CM, and oversight of the management of each risk is assigned to a specific Board Committee or to the full Board. Results from the SER identified climate change as a substantive issue that could result in natural disasters, water scarcity, change in weather patterns, agricultural instability, reputational damage, shifts on market preferences and other impacts that could directly affect PMI's ability to operate. Our Senior Vice President (SVP) Operations has been tasked with responsibility to address climate change risks and opportunities across the company, including physical climate, and transition risks. Our SVP Operations is responsible to ensure that these risks and opportunities are assessed, managed, integrated into long-range plan and budget review process, and reported to the appropriate Committee and the full Board throughout the year. The identified SER are considered during the annual Integrated Risk Assessment if they are deemed to have a substantive financial or strategic impact on the business. 2) Integrated Risk Assessment (IRA) process - The IRA is PMI's second process to identify and manage risks and opportunities in direct operations and supply chains. The IRA builds on company-wide findings from the SER to further assess how these can impact PMI's operations at a department level on an annual basis. When it comes to climate related events, PMI focuses on the evaluation of physical and transition risks as per recommendation of the TCFD. To date, PMI has mapped 149 climate change risks and opportunities across materiality and certainty, and classified in: 'Proactive', 'Reactive', 'Non-material', 'Watch' and 'Potential quick wins'. After further analysis, PMI is now focusing on the 'Proactive' category as it was identified that these events have the highest certainty and materiality level. As part of the IRA, PMI developed an extensive risk control program to assess and mitigate physical risks from climate change; locations exceeding \$30M range are surveyed by engineers from our property insurer, who provide risk management recommendations. 3) Environmental Risk Management (ERM) process - The ERM is PMI's main process to identify and manage substantial risks and opportunities at the operational level. The ERM builds on the IRA to further analyze operational implications from the identified risks and opportunities. Results from the ERM are used by PMI's stakeholders to develop programs, roadmaps, action plans, targets and budgets to either prevent substantial risks from materializing, or to seize opportunities. Results from the ERM are monitored by each of PMI's relevant department and communicated to the relevant stakeholder on a monthly basis, e.g., to the SVP Operations. In the case of climate change, the SVP Operations is responsible for communicating progress on PMI's climate-related actions to the Board and its Committees, and subsequently re-inform steps 1 and 2 of process. An example of PMI's processes applied to the identification and management of transition risks and opportunities is the development of PMI's Science Based Target. Using the four-risk dimensions as part of SER management and once decided to focus on risks and opportunities classified as 'Proactive' through the IRA process, PMI's Board, its Committees and CM identified and assessed a critical need to meet the 2015 Paris Climate Agreement Goals. Failure to achieve these goals can result in substantial impacts to global agricultural supply chains, and subsequently impact PMI's operations. PMI acknowledged these risks, and recognized corporations had concrete opportunities to lead climate action. In 2016, PMI developed emission reduction targets for its scopes 1, 2 and 3 which were approved by the Science Based Targets Initiative (SBTi) in 2017. In 2020 our revised absolute reduction targets aligned with the 1.5°C scenario, have been again approved by SBTi. PMI commits to climate action in line with best climate science, to seize opportunities related to operational efficiency (e.g.: energy efficiency, on-site investments for renewables generation and/or sourcing) and has been able to mitigate transition risks such as reputational impacts, shifts in market preferences and policy changes related to inaction. Another example of PMI process to identify, assess and respond to physical climate risks and opportunities is Good Agricultural Practices (GAP) program. PMI identified and assessed physical climate risks within its tobacco supply chain incl. drought and seasonal variability as relevant to 62% of our sourced tobacco which is rainfed. PMI tackles those risks through GAP program by implementing mitigation and adaptation practices. In 2020, PMI engaged 285,900 tobacco suppliers and contracted farmers through GAP providing them with a set of climate-smart agriculture practices, action plans and monitoring tools to promote a more resilient supply chain to impacts from climate change such as drought, floods, and fires. GAP also supports farmers switching to low carbon curing fuels, minimizing their dependency on fossil fuels for curing and potential impacts due to price fluctuations.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	We are subject to international, national and local environmental and climate-related laws and regulations in the countries where we operate; regulations which are considered in our climate-related risk/opportunity assessment process. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, confirming its application in 2020; this allowed the identification of transition risks for PMI related to an increase in carbon pricing affecting operations manufacturing and logistics, and regulation on energy efficiency levels affecting our factories processes in the short term. Examples of these risks are the potential expansion of: -the EU emissions trading scheme will include additional PMI sites – i.e., our factory in Romania was included in 2020 due to increased production capacity. This could lead to an increase in PMI's operating costs of purchasing allowances in the future, particularly in high emitting locations in EU. -carbon pricing mechanism across all the markets in which PMI operates. We particularly monitor countries with a local ETS scheme already in place, i.e., Canada, Switzerland, South Africa and South Korea. In those countries the risk is rather moderate at the moment due to the emission profile of our manufacturing sites vs. the minimum threshold needed to have a significant financial impact. We closely monitor regulations on minimum threshold and signals of changes in these schemes, and we consider those aspects in the strategic deployment of our manufacturing and supply chain networks including investments to increase energy efficiency. We monitor current regulations in those markets also due to the potential risk they can pose in case we would decide to expand the production capacity of our manufacturing sites located there; especially in relation to our RRP products which are more energy intensive compared to conventional products and resulting in increased GHG emissions. The potential impact of this risk is related to higher operating costs. - Increase of carbon prices within the EU Trading Scheme which would have a potential impact in our operations if it materializes. This would expose our operations to requirements for increased capital expenditures, taking in consideration the potential for combined heat and power, renewable energy and buildings upgrade, to reduce emission profiles of our sites and mitigate the risk posed by EU ETS carbon prices increase impacting operating cost.
Emerging regulation	Relevant, always included	Our operations throughout the globe are subject to various climate-related regulations, which we consider in our climate-related risk/opportunity assessment process. There is a clear international trend towards proliferating and stricter climate-related regulations which could increase our operational costs. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, and we reviewed it in 2020. This exercise allowed the identification of mid and long term transition risks for PMI business related to technology. In this category, PMI mostly incurs risks related to an increase in carbon pricing affecting operations manufacturing and logistics, and regulation on energy efficiency requirements affecting our factories or mechanized farming processes in the mid and long term. Examples of risks include: - EU Emission Trading Scheme (ETS): risks linked to widening the EU ETS carbon trading market to include EU accession countries where PMI has facilities. - Energy taxes; regulation on Energy Efficiency; Infrastructure/Buildings Directive; promoting energy reduction at source (like in our EU factories); regulations in emerging market, exposing our operations to requirements for increased capital expenditures taking in consideration the potential for combined heat and power; renewable energy and buildings upgrade. - Regulations on energy efficiency in the heavy machinery and heavy-duty transport sector are expected to tighten, and the speed of this change in regulation will be heavily depending on the rate of low carbon transition. Mechanical equipment used on farms is currently both energy intensive and heavily reliant on fossil fuels as an energy source. In particular, these regulations could result in an increase in the speed of the replacement cycle of machinery and equipment by the farmers resulting in higher annual expenditure on replacement to keep pace with efficiency standards. This in turn would cause an associated indirect increase in procurement costs as the price for tobacco will respond to upward pressure on the cost of production. Those regulations could also expose our operations to requirements for increased capital expenditures to mitigate their impact.
Technology	Relevant, always included	In 2020 the review of the evaluation of climate change risks aligned with TCFD recommendations conducted in 2019, allowed to further identify mid and long term transition risks for PMI business related to technology. The identified risks relate to technology improvements resulting in existing equipment becoming either non-compliant with upcoming energy regulations and/or too expensive to run due to the higher costs of fossil-fuel within our own operations and supply chains. Existing equipment would need to be replaced with associated costs of adopting new tech, exposing our operations to requirements for increased capital expenditures. In addition, in 2020 we submitted our revised absolute reduction Science Based Targets (SBT) aligned with a 1.5 °C scenario, which were approved by SBT initiative. PMI's decarbonization path to achieve new SBTs will need to be more aggressive, while RRP production growth will drive increase in energy consumption and related GHG emissions. A strong investment in new tech will be needed to achieve the decarbonization path that we have committed to, with the risk that despite our investments we may not be able to achieve our SBT commitments due to RRP's being more energy voracious. PMI's risks also relate to not following technological advancements (e.g. low energy efficiency equipment), investing in obsolete technologies (e.g. non-regenerative agricultural practices) and higher costs/polluting technologies (e.g. fossil-fuel based tech) when developing new drivetrain technologies, new farming and curing techniques and equipment, new tech in retail and new product design. All these risks exist, and PMI needs to ensure neither it nor its suppliers invest in obsolete technology to remain up to date with technological development within its own operations and supply chains. This can be costly and potentially impact operating costs if not mitigated. We continuously assess risks related to technological improvements that support the transition to a lower-carbon and energy-efficient business model. An example of this risk is related to our electronics manufacturing suppliers which are key to achieve our smoke-free future goal. We assessed through LCAs the risk of carbon footprint increase due to new electronics suppliers and the impact if they would not invest in low carbon technologies to mitigate the emissions in their processes and resulting in PMI potentially not being able to meet its carbon reduction SBT commitments.
Legal	Relevant, always included	We are subject to international, national and local environmental laws and regulations in the countries we operate. We have specific programs across our business units designed to meet applicable environmental compliance requirements to reduce our carbon footprint, wastage, water and energy consumptions and prevent any climate-related mitigation claims. Our subsidiaries expect to continue and/or increase expenditures in order to drive improved performance and maintain compliance with environmental laws and regulations, as first of all, compliance which such policies and regulations are core to the way PMI operates; moreover as non-compliance could result in fines, or even in partial or total withdrawal of the operation permit. We assess and report the compliance status of all our legal entities on a regular basis. Based on the management and controls we have in place and our review of climate change risks (both physical and regulatory), environmental expenditures have not had, and are not expected to have, a significant adverse effect on our consolidated results of operations, capital expenditures, financial position, earnings or competitive position. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, and we confirmed it in 2020. This exercise allowed the identification of mid and long-term legal transition risks for PMI business, including those triggered by changes in climate policy or regulations. Legal compliance to such policies and regulations changes are core to the way PMI operates but may result in increased operational costs for PMI, such as: - increasing procurement costs linked to higher cost of raw materials and the cost of production; - impacting logistics and operations through increased carbon pricing; - affect mechanized farming processes through new regulation on energy efficiency requirements; and - impacting tobacco curing activities through additional regulation on fuel type. PMI has not been subject to significant fines, in the reporting year, related to environmental regulations specific to climate change.
Market	Relevant, always included	In 2020, we continued our evaluation of climate change risks aligned with TCFD recommendations, which confirmed the identification of transition risks for PMI business related to market changes, such as shifts in supply and demand for certain commodities, products and services. For PMI this includes risks of increasing costs of sourcing (including materials such as water and diesel) and increasing costs for suppliers, resulting in higher procurement costs. It also includes increasing competition for agricultural land, leading to less available or more expensive land for tobacco growing. Other market risks are related to PMI's investors and financial performance and include the inclusion of climate risk metrics by credit rating agencies, affecting PMI's score, and a general trend of investors moving away from carbon-intensive sectors. Finally, downstream market risks are associated with shifting consumer demands for lower-carbon products. Two concrete examples of how risks are assessed are described below: 1. Diesel is widely used in many farming practices. PMI's agricultural supply chain and the related purchases of raw materials are influenced by the cost of production for farmers. Energy is a significant cost in farming practice in relation to the mechanical equipment used. If diesel prices increase, the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result. This in turn would cause an associated indirect increase in procurement costs as the price of tobacco will respond to upward pressure on the cost of production. A key factor in diesel prices is global oil prices, which are expected to have different developments depending on the transition pathway taken at a global level. Under transition pathways aligned to 2 degrees scenario or below, the oil demand will be lower than under scenarios associate with greater temperature increases. As such the expected increase in oil prices and indirectly tobacco prices paid by PMI would be lower in a 2-degree scenario. 2. We track commodities (pulp, aluminum, glycerin, ethylene, mint crystals, guar seeds, coconut shell to name a few) through market indicator (RISI, ICIS, IHS or MCX) that provide price and supply chain scenario analysis of the commodities allowing PMI to track the source of its product and ensure the suppliers comply with relevant (industry, regional, international) regulation(s).
Reputation	Relevant, always included	Stakeholder interest and expectations in climate change adaptation are increasing as the effects of climate change become more apparent, society is asking businesses to become part of the solution changing their practices. NGOs campaigns can impact companies' reputation and have business consequences on license to operate and bottom line. PMI aims to combat climate change and set actions to act upon it. Those actions are conducive to substantiate PMI's leadership in sustainability as integral part of the success of its business transformation. Thus climate-related reputational risk is included into PMI's risk assessments considering the potential risk it could have on the long term success of the company. In 2020, we continued our evaluation of climate change risks, aligned with TCFD recommendations and identify transition risks related to the reputation of PMI as a sustainability leader in the area of climate change; this evaluation included a survey of opinions of certain PMI stakeholders on how PMI contributed to or detracted from the transition to a lower-carbon economy. PMI identified that reputational risks can be driven by multiple factors including financial performance, investors' priorities, reporting requests, internal workforce concerns around sustainability, and challenges related to raising capital for the agriculture sector as a carbon intensive one. E.g., PMI identified failure to address enhanced reporting requests as a potential reputational risk for the company. Increased reporting not only requires additional internal resources, but also exposes the company to a broader stakeholder community and sectoral benchmarking. PMI manages this risk by having an internal reporting team that coordinates reporting initiatives, as well as engagement with external consultants to ensure consistency through multiple reports, transparent communication, effective benchmarking against relevant sustainability ratings and the use of best practice methodologies and standards. We also conduct periodically a sustainability materiality assessment with a broad range of stakeholders. We strengthened our communication through our reporting. Our Integrated Report 2020, which covers our sustainability work, sought to align with the IIRC, GRI and SASB frameworks as well as with the recommendations of the TCFD and requirements of the CDP and other sustainability ratings; those documents and additional content can be consulted in our website.
Acute physical	Relevant, always included	Extreme weather events due to climate change have the potential to significantly impact our operations, buildings and suppliers, therefore having a substantive impact on our supply chain and on our business continuity plan. Flooding or typhoons can damage our buildings and goods, as well as the crops of our farmers and our logistics networks. In 2015, PMI performed a comprehensive Climate Change Risk Assessment (CCRA) for corporate and asset level physical risks and opportunities up to 2025-2030. This assessment was reviewed in 2020, to align with TCFD recommendations, and complemented with the water physical risks in 2020. The Water risk assessment was conducted using the WRI Aqueduct tool to determine the global risk factors that affect the areas where we operate and source tobacco from. The risk assessment process included key assets such as factories/warehouses, supplier's processing facilities/warehouses, as well as ports, and tobacco growing regions. Some of the risks identified in our own operations, and tobacco supply chain were those resulting from flooding and cyclones, e.g., in Brazil, Philippines, and Indonesia, which could lead to building and goods' damage, as well as crop losses to our farmers and disruptions to our logistics networks. In our manufacturing site in Indonesia, this could cause damage due to business interruption in the range of \$0.4 million to \$3.5 million, while in our tobacco growing areas in Brazil and Philippines could cause interruptions in our supply chain with a financial impact ranging from \$3 million to \$17 million. This information is reviewed regularly with top management; it enables risk/opportunity identification and management at the company and asset level, and includes regulatory climate change aspects and geopolitical risk. Our substantial tobacco leaf inventories can help mitigate short to medium term impacts.

	Relevance & inclusion	Please explain
Chronic physical	Relevant, always included	Longer term weather shifts due to climate change have the potential to significantly impact our operations, assets and supply chain therefore having a substantive impact on our supply chain and on our business continuity plan. In 2015, PMI performed a comprehensive Climate Change Risk Assessment (CCRA) for corporate and asset level physical risks and opportunities up to 2025-2030. This assessment was confirmed in 2020, to align with TCFD recommendations, and complemented with the water physical risks in 2020. The Water risk assessment was conducted using the WRI Aqueduct tool to determine the global risk factors that affect the areas where we operate and source tobacco. The risk assessment process included key assets such as factories/warehouses, supplier's processing facilities/warehouses, as well as ports, and tobacco growing regions. Results from the risk assessment process are reviewed regularly with senior management, enabling risk/opportunity identification and management at the company and asset level as well as in our logistic networks and supply chains. For instance, drought and water stress may impact our manufacturing operations, e.g. our facilities in Italy and Poland, due to the fact that water is essential for our production processes (products and for utilities), and therefore exposing our operations to requirements for increased capital expenditures to prevent business disruption due to water unavailability. The business interruption cost in our own operations are estimated in the range of \$2.4 million to \$19.2 million over the long term. The same risk in our tobacco supply chain in the growing regions of Indonesia, where we source tobacco and clove, could have adverse impacts both on quality and yield and result in potential financial impact of \$4 million to \$14 million over a long-term period. Similar issues would occur with accelerated land degradation in Africa due to droughts or accelerated desertification of areas where deforestation is taking place. This is one of the core problems that PMI is addressing through its Good Agricultural Practice program.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Carbon pricing mechanisms
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Our operations throughout the globe are subject to various climate-related regulations. There is a clear international trend towards increasing and stricter climate-related regulations which could increase our operational costs. These include but are not limited to CO2 related trading schemes such as the EU Emission Trading Scheme (EU ETS). As of December 31, 2020, PMI owned and operated a total of 3 factories in the Netherlands, Italy and Romania covered by the EU ETS, with total verified emissions of over 40,000 metric tons of CO2e. PMI doesn't have, for the time being, other factories in the EU and EU accession countries which could become subject to EU ETS. Although the cost of EU ETS carbon credits has been lower in the past several years due to a large surplus of allowances, the cost of allowances has increased lately and is expected to further rise. According to the European Commission, allocation to industrial installations received 80% of the free allowances in the 2013. This proportion has been decreasing gradually year-on-year, down to 30% in 2020. The revision for phase 4 (2021-2030) of the revised EU ETS directive will trigger more stringent greenhouse gas emissions reduction target with a mix of interlinked measures, among which, an increase of the pace of emissions cuts at an annual rate of 2.2% as of 2021. This could lead to an increase in PMI's operating costs of purchasing allowances in the future, particularly in high emission locations in EU markets. The potential identified risk is to see the production prices increase impacting operating costs. We closely monitor if regulations on minimum threshold in these schemes are changing and signals of new emerging regulations and we consider those aspects in the strategic deployment of our manufacturing and supply chain networks including investments to increase energy efficiency. If this impact reveals to be substantial, we would focus our efforts to increase energy efficiency in those factories.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

2800000

Potential financial impact figure – maximum (currency)

5600000

Explanation of financial impact figure

Although the cost of EU ETS carbon credits has been lower in the past several years due to a large surplus of allowances, the cost of allowances is expected to increase due to stricter regulations and more significant long-term reforms to reduce oversupply. According to the European Commission allocation to industrial installations received 80% of the free allowances in the 2013. This proportion has been decreasing year-on-year, which could lead to an increase in our operating costs of purchasing allowances in the future. Based on a comprehensive review of policies and methodologies (price corridor from ICPC), we recognize the importance of defining a carbon price per ton of

CO2e that will remain stable over time and ensures that climate transition risks are embedded in capital expenditure decisions (i.e., in order to allocate capital for the best return in terms of carbon reduction and cost-effectiveness). In 2020, as we are stepping up our ambition to reduce carbon emissions, aligned with the 1.5-degree trajectory, we developed an internal methodology to model a Shadow Carbon Price integrating in today's shadow carbon price evaluation, the transition risks 10 years in advance for a forward-looking approach. In 2020 exercise, for example, the PMI's shadow carbon price was set at \$65 per ton of CO2e. We estimate the potential financial impact to be between \$2.8 million and \$5.6 million considering: - the above and a worst-case scenario of constant emissions as of 2020 (whereas emissions due to the growth of production capacity are evened out by improvements in energy efficiency and other mitigation measures); - the carbon footprint profiles of our 3 factories in EU ETS scheme in 2020 and applying an annual cost of emissions allowances forecast to be between \$40 and \$80/tCO2 in the medium term. The calculation applied is the following: 70,000 t/CO2e (representing the emissions of the 3 factories) * \$40 = \$2,800,000 70,000 t/CO2e (representing the emissions of the 3 factories) * \$80 = \$5,600,000 Mitigation measures have been anticipated to ensure that carbon tax will be kept as minimal as possible.

Cost of response to risk

10200000

Description of response and explanation of cost calculation

Mitigation measures have been anticipated and the plants have undergone an energy efficiency program to ensure that despite being over the EU ETS threshold in energy consumption the carbon tax will be kept as minimal as possible, even aiming to go back to below threshold in the future and be exempted from the scheme. We manage the risk through our Energy Management Program (EMP), which consists of energy consumption monitoring and investments in energy conservation and efficiency improvement projects. We have an energy monitoring and targeting system in place, with an annual cost of \$200k. Drivers like EU ETS and EU EED led us to consider process changes (e.g., replacement of outdated combustion equipment to more efficient equipment that can potentially reduce our energy load to below the 20MW regulatory threshold). From 2014-2018 we delisted certain sites from EU ETS as they fell below the total combustion capacity threshold. Wider best practice sharing and energy/GHG reduction projects are part of EMP, and they involve specific investments for an annual set budget of around \$10M. Our EMP enables us to analyze consumptions and serve as basis for potential carbon tax exemptions and "cost to comply" reductions with the EU ETS. We use a shadow carbon price set at \$65 per ton of CO2e as an internal lever designed to accelerate carbon emissions reduction by ensuring that the company's investment decisions reflect all costs, including environmental ones. We use this price to better understand the potential impact of external carbon pricing (e.g., carbon taxes) on the profitability of a project, or an investment, and hence drive and prioritize investments that accelerate CO2 emissions reduction. PMI's shadow carbon price is integrated into the financial evaluation and preparation of business cases that will impact our carbon emissions (favorably or unfavorably); in 2020, it was instrumental in the approval of 13 additional carbon emission reduction projects as part of our energy saving initiatives program in our manufacturing sites. Our annual cost of management is the sum of investments in energy conservation and efficiency initiatives (approx. \$10M) and the energy monitoring system operating costs (\$200k).

Comment

The EU ETS scheme has been an additional driver for the implementation of our energy efficiency program at global scale to anticipate the clear international trend towards increasing and stricter climate-related regulations which could increase our operational costs. Our activities in this area fall under the scope of our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program to eliminate energy losses. Design standards include low GHG building practices, e.g., for materials and efficient lighting. In our factory in Russia, for example, it was necessary to drain around one percent of the steam that our boiler produced to maintain the desired water-quality parameters. This meant heat loss. We found a way to recover the wasted heat by installing a heat exchanger, which used the heat to generate steam. In that same factory, the water used for domestic purposes and radiators was heated by inefficient electric heaters, leading to avoidable losses. We installed a thermal pump that was five times more efficient, leading to a reduction of 210 tons of CO2e per year. Meeting our energy and CO2 reduction targets means that our Russia factory will already fulfill or exceed new state regulations such as the "energy conservation and improving energy efficiency in the period up to 2020" law. Our Swiss affiliate emissions have been consistently below the allowances' threshold thanks to the implementation of energy saving program such as the implementation of a heat pump and more innovative technology such as pyrolysis of factory's organic waste to generate energy. The latter is a "Drive 4 Zero" initiative to support the carbon neutrality target and also to optimize waste management; the pyrolysis plant is expected to contribute to cut GHG emissions of the site by 63%.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

In the short- to long-term most of PMIs sourcing regions face risks due to physical climate change events, such as cyclones, floods and others, potentially affecting our tobacco suppliers' capability to deliver on contracted volumes globally, e.g., in Brazil, which is among PMI's top 15 tobacco origins. Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality and availability of the tobacco crops, triggering a substantive risk in case the potential financial impact is above our threshold (1000 metric tons of tobacco leaves), resulting in sourcing plans modification and increasing operational costs. A substantive impact in Brazil could have the potential to delay deliveries of tobacco affecting significantly the production cycle all the way to the product. Considering that Brazil volumes represent 45% of the total tobacco volumes at risk of climate change related losses, the impact on the business when floods, droughts, and hail impact our tobacco growing areas is relevant. In 2020 tobacco volumes were significantly impacted by extreme weather events, causing relevant crop losses to contracted farmers, e.g., in Brazil, where over 2,300ha of production in the South regions were impacted due to extreme weather events such as flood, hail and mainly drought. The volume losses experienced by tobacco farmers were volumes already contracted by PMI. We had to work on a contingency plan with our suppliers to fulfil our volumes to requirements. The volumes had to be booked in a short time window thus reducing the power of negotiation that is typical of pre-booked volumes and potentially impacting the price above the substantive impact threshold of \$5 M. Extreme rainfall in the fields may require pumping of excess water; while extreme droughts could require long-term irrigation, both of which would increase tobacco production costs above our substantive financial impact threshold. Changes in precipitation patterns could also affect local logistics, with extreme precipitation events potentially leading to inaccessibility of road networks, disrupting the delivery of tobacco.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

4000000

Potential financial impact figure – maximum (currency)

17000000

Explanation of financial impact figure

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to extreme weather events in our tobacco origins in Brazil in a given year. The range of potential financial impact is derived from previous years' data on crop losses due to extreme weather events, which could lead to increase tobacco production costs as PMI has to look for alternative volumes to be purchased in a short time window, combined with our comprehensive climate change risk assessment tool. Setting the basis as PMI threshold for substantive financial impact (1,000 metric tons of tobacco leaves) for the specific case of Brazil, the lower range results in an estimate 3% (of the sourced volume or spend). The upper range reflects an estimation of 10% (of the sourced volume or spend) based on historical crop loss data (actual impacts reported) and our modelling projection. We estimated the relative magnitude in a range of around \$4-17M per year while we foresee this risk in the short to long-term (>6 years) for the Brazilian growers due to supply chain disruptions arising from extreme weather events such as excessive rain fall, hail and drought, and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions. The costs' estimation takes into account the above factors, however, due to their inter-correlation, our modelling provides a bottom and top range.

Cost of response to risk

250000

Description of response and explanation of cost calculation

The cost of response is based on the set yearly budget allocated in 2020 to environmental projects under the Good Agricultural Practices (GAP) program implementation in Brazil. GAP program is PMI's main initiative to tackle physical climate risks within the company's tobacco supply chain, as identified through our Strategic Enterprise Risks and Company's Integrated Risk Assessment processes. GAP program provides suppliers with a set of climate-smart agriculture practices, action plans and monitoring tools to promote a supply chain that is more resilient to impacts from climate change such as drought, floods, and fires. Under GAP program, projects were implemented in Brazil's southern region in 2020, near PMI's manufacturing facility in Santa Cruz do Sul, focusing on increasing the resilience of natural ecosystems to better protect local communities and their economic activities in the tobacco growing areas. Around 47,500 contracted farmers supply tobacco to PMI (directly or via third-party suppliers) within the region and the focus of GAP initiatives is on water source protection and landscape conservation practices related to tobacco farming with planned monitoring and training at farm level. In Brazil around 330 field technicians work year-round with the contracted farmers and suppliers of tobacco to PMI, visiting the farms on average five times during the crop season to monitor projects implementation. Additionally, technology is also being deployed; for example, PMI is using drones to map and scout tobacco fields in North-East Brazil, generating live data for decision making on crop management. In 2020, The cost of these initiatives was around \$250,000 which includes the total cost of on farm water management and water stewardship activities (e.g., spring protection projects) at landscape level, together with the roll out of a specific "on farm and next to the farm" biodiversity conservation program. 50% of the expenditure is coming from the implementation of forest protection, renewable fuels and good agricultural practices programs that include training, stakeholder engagement and verification of the results reported. PMI's investment in these initiatives is included in the cost of response and represented approx. 5% of the global 2020 expenditure in environmental projects, similar yearly expenditure is expected over the next 10 years to further support mitigating short to medium term impacts.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market	Increased cost of raw materials
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Increased production costs for farmers in the supply chain can be due to changing input prices, specifically diesel costs. For PMI this has an impact on procurement expenditure on tobacco from third-party leaf suppliers and directly contracted farmers. Due to fuel cost relevant weight over the other cost components, an increased cost of fuel for agriculture could result in an increase of the final tobacco price. Diesel is widely used in many farming practices, including transportation and the operation of mechanical equipment. PMI and its supply chain purchases of tobacco are influenced by the cost of production for farmers, whereas energy used to run mechanical equipment represents a significant part of that cost. Approximately 80% of our purchased volume comes from mechanized farms consuming between 100 and 300 liters of diesel per hectare of tobacco, depending on the mechanized activities and the soil type. If diesel prices increase, the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result. Based on data collected through surveys in farms where diesel expenditure represented up to 10% of the overall cost of production, this in turn would cause an associated indirect increase in procurement costs as the price of tobacco would respond to upward pressure on the cost of production. Specific markets may be more susceptible to fuel price fluctuations as they are characterized by farms more dependent on mechanized activities, for example in tobacco farming in Argentina, US and Italy where the adoption of mechanized activities is above the global average; the three markets are within PMI's top 15 sourcing markets causing the sourcing strategy to be likely affected by a significant fluctuation in diesel price for agriculture. A key factor in diesel prices is global oil prices, which are expected to have different developments depending on the transition pathway taken at a global level. Under transition pathways aligned to 2 degrees scenario or below, the oil demand will be lower than under scenarios associated with greater temperature increases. As such the expected increase in oil prices and indirectly tobacco prices paid by PMI is lower in a 2-degree scenario.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

110000000

Potential financial impact figure – maximum (currency)

225000000

Explanation of financial impact figure

Diesel price was modelled between 2017 and 2030 using the International Energy Agency (IEA) scenario data for projected oil price, and the assumption that the ratio between oil and diesel price would remain constant. The cost of diesel to farmers as a portion of total cost of production was estimated using an internal model and a proxy based on diesel and oil prices from public data sources on typical cost shares for similar agricultural commodities applied to the mechanization profile of PMI's farmer base (pro-rata based on volumes sourced yearly). This share was then applied to the current and future forecasted procurement spend on tobacco by PMI each year. It was then assumed that the PMI tobacco procurement expenditure would remain constant in a business-as-usual scenario and increase by the same rate as diesel price under climate change scenarios. The result after the application of the aforementioned calculation methodology, and factoring farmers' uptake of new technologies, renewables and future forecasted tobacco requirements, was that the potential financial impact of the risk is estimated in a range of \$110 million to \$225 million per year if not mitigated, while we foresee this risk in the short to long-term (>6 years). PMI's response and mitigation strategy are described below.

Cost of response to risk

5000000

Description of response and explanation of cost calculation

Since 2002 PMI has implemented the Good Agricultural Practices (GAP) program. GAP is a program with mandatory requirements for our tobacco suppliers and their contracted farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change. Strategic initiatives include improving efficiency and switching to low-carbon energies, making tobacco suppliers, their farmers and PMI more resilient to price increments on diesel. The cost of response is based on the yearly budget allocated to environmental projects in 2020 (mainly related to climate change, water security and biodiversity) and crop efficiency improvement projects under the GAP program implementation across all regions, accounting for approx. a set annual budget of \$5 million in expenditures for initiatives within our tobacco supply chain including but not limited to the adoption of improved and innovative practices by the farmers. Within the GAP budget we consider relevant for mitigating direct costs the initiatives that have been approved by the sustainable agriculture steering committee in line with the strategy to decrease the use of crop inputs without influencing negatively farm outputs (e.g., yield per hectare). Due to force majeure causes linked to the Covid-19 pandemic, 57% of the total budget approved i.e., \$5 million, has been spent for driving efficiency in agriculture in 2020. Specifically, agricultural best practices such as reduced tillage and no-tillage are fostered, which generate a wide range of benefits, such as decrease in intensity of mechanized activities at field stage thus reducing the dependency on fuel and to the overall cost of production. In 2020, gradual switch to renewable sources and barn efficiency improvements led to: - 67% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in Pakistan, the Philippines, Italy, Spain, Malawi, Mozambique, Mexico, Brazil and Argentina); - 45% of the fuel was sustainably sourced firewood (and 22% other biomass); - flue-curing GHG emissions intensity was 77% lower (vs. 2010); - reduction of 240,204tons of CO2e (vs. 2019); - the improvement of tobacco curing barn efficiency lowering fuel consumption; - increased collaboration with PMI Leaf suppliers fostering additional collaboration on climate change related risks, and in other areas with potential positive impact on our business and share value with society.

Comment

PMI plans to maintain similar level of investment over the next 10 years.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Based on Germanwatch's annual Climate Risk Index (2021), the Philippines is in the top 5 countries (4th) most affected by climate change impacts (including cyclones and flooding) resulting to an average loss of \$3.2billion in purchasing power parity to the country from 1999 - 2019. The supplies of tobacco leaf in Philippines (one of PMI's top 15 tobacco sourcing countries), coupled with negative impacts on tobacco crop quality, and supply chain manufacturing restrictions due to increased severity and frequency of extreme weather events could impact PMI's production and tobacco sourcing strategy, leading to increase in direct costs for PMI, suppliers and farmers. Tobacco leaf growing can be strongly affected by small changes in physical climate conditions such as changes in temperature and precipitation. Furthermore, yield, quality and availability of the tobacco crop could be negatively impacted by changes in precipitation and periods of drought, which are increasing in frequency in recent years. This could affect our access to tobacco supplies, impacting our crop buying pattern and increasing operational cost, affecting PMI manufacturing operations and business directly. We consider a range for the increase in our operational cost between 16% and 32% given by our modelling and estimation of medium-long term impact of adverse extreme climate events on our supply chain in the Philippines. In case of significant damage to the crop we would be forced to look for alternative sourcing areas within the country in a short time, impacting significantly our power of negotiation. This would also cause additional effort in defining the logistics and the approach to the supply chain thus driving the total cost of tobacco above the budgeted price for Philippines.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

3000000

Potential financial impact figure – maximum (currency)

6000000

Explanation of financial impact figure

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought, flooding and cyclones for the specific case of the Philippines. The lower range derives from our comprehensive climate change risk assessment tool (CCRA based on the IPCC and RCP8.5) combined with the threshold defined for the substantive financial impact, resulting in a 16% estimate (applied either to the sourced volume or spend). The upper range reflects an estimation of 32% based on our modelling projection of the expected climate change for this country (worst case scenario). We estimated the relative magnitude between \$3-6 million per year and we foresee this risk in the short to long-term (>6 years) for the Philippine growers due to supply chain disruptions arising from cyclones, drought and flood events during the growing season and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions.

Cost of response to risk

160000

Description of response and explanation of cost calculation

As part of our procurement strategy, we require all tobacco suppliers to follow our Good Agricultural Practices (GAP), which provide measures to mitigate water related risks, through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including Leaf suppliers. PMI utilizes LRA results to implement initiatives with farmers to improve agricultural resiliency to flooding and drought such as the case in the Philippines where the results of the LRA in 2019 led to planning and implementation of interventions. To ensure business continuity, PMI has substantial inventories of tobacco leaf which can help mitigate short to medium term impacts. The cost of response is based on the set yearly budget (i.e. we set a single investment amount into the program and it is not possible to provide a breakdown) allocated to the Philippines for environmental projects in 2020 (mainly related to climate change, water security and biodiversity) under the GAP program, accounting for approx. \$160 thousand for initiatives in our tobacco supply chain. The engagement with tobacco suppliers to drive improvements in crop management and environmental protection in the Philippines were included in the cost of response and represented approx. 3% of the global 2020 expenditure in environmental projects for the GAP budget. In 2020, we developed a targeted study to map the potential of nature-based solutions (NBS) in our tobacco supply chain and evaluate nature-based carbon sinks in the context of our carbon neutrality ambition. The focus was on testing multiple methodologies in three markets (Brazil, Mozambique, and the Philippines) where we believe opportunities are significant and investments could yield the best return in carbon removals generated. The methodologies that we selected are internationally recognized and aligned with the strategy of promoting more resilient forests and sustainable agriculture. We applied reforestation, afforestation, and adoption of sustainable agricultural land management methodological approaches. The study was useful to define the lines of intervention and the scale we will be adopting for future NBS projects in our supply chain, through improved conservation practices and rehabilitation of natural ecosystems we aim at more stable landscapes where extreme events will impact less on crop losses.

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Increase water stress, droughts and riverine flood)
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Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

In early 2020 we reviewed and assessed our water related physical risks, that are also integrated in our TCFD Climate Change Risks and Opportunities (CCRO) assessment. This water risk assessment was performed with the use of WRI Aqueduct. The identified water risks related to climate change were physical (chronic & acute). Throughout the overall portfolio of the manufacturing sites, 4 strategically significant factories were identified at "high risk" or "extremely high risk" toward water stress, droughts and/or flood (by flood we mean riverine flood), as result to the shift on the precipitation patterns. At our manufacturing sites, high quality freshwater is used for WASH (Water Access Sanitation and Hygiene) services, and for manufacturing processes including the preparation of flavors, liquid products, in several stages of the tobacco processing, among others. Good quality fresh water is also an ingredient in the manufacturing process of our RRP products which are expected to have an increased importance in PMI's strategy in the future. PMI expects its direct dependency on water to increase in the short to medium term (up to 5 years), as the company will transition to RRP which are more water-intensive in their manufacturing processes. More specifically, our manufacturing facilities in: a) Italy, 2 sites, are directly exposed to potential disruptions in production capacity due to water stress and drought. One site was responsible for about half of PMI's total production of heated tobacco units (HTUs). Our second site is a HTUs manufacturing centre and is important in PMI operations, not for its manufacturing capacity, but for the capability to evaluate manufacturing optimization practices. b) Indonesia, one site responsible to produce around 9% PMI's total cigarettes production, is exposed to riverine flood. c) Poland, one site, responsible to produce around 11% of PMI's total cigarettes production, is exposed to drought. Several water efficiencies, reuse, recycling and conservation projects have been implemented in order to increase resilience in drought and water stress and in Indonesia, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term flooding events.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

2820000

Potential financial impact figure – maximum (currency)

22620000

Explanation of financial impact figure

We estimate the relative magnitude at the range of \$2.8 million to \$22.6 million in the medium to long term (4-6 years) for our operations based on potential disruptions in production capacity and current production data, as well as per our insurance's estimations (i.e.: in case of a minor event to all four sites, the sum of the cost of disruption is about \$2.8M and in case of a major event to all four sites the sum of the cost of disruption is about \$22.6M; the financial impact was estimated based on the size of each one of the four manufacturing sites and the respective business disruption period, in the case of minor and a major event; the impact in each site ranges from \$0.40M for minor event in the smaller site in Reno, Italy, up to \$11.8M for a major event in the biggest of these manufacturing sites, again in Italy in Samoggia river basin), not having experienced yet such an event. This impact is split 54% in our facilities in Italy, 15% in our facility in Indonesia and 31% in our facility in Poland. PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labour costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption will depend on the site's ability to recover from an event: Minimum financial impact = Number of interruption days in minor event * non avoidable operating cost per day Maximum financial impact = Number of interruption days in major event * non avoidable operating cost per day

Cost of response to risk

4493000

Description of response and explanation of cost calculation

The cost response to the water risks, is calculated separately in each site and reported here as a sum of around \$4.493 million, allocated as 76% in Italy, 22% in Indonesia and 2% in the facility in Poland. More specifically, in Italy, since 2018, several water efficiency, reuse, recycling, and conservation projects have been implemented in order to increase resilience in drought and water stress. These technologies have been tested and implemented and will continue to be implemented in the following years. The investment in these technologies amounted \$1.2 Million in 2018 and \$1.7 million in 2019, while in 2020, and due to COVID 19 pandemic restrictions, only 3 initiatives were implemented and didn't require significant investment. Specifically, in 2020, PMI implemented in Italy: - a project for the cooling of the boiler blowdown with re-used water; - a modification in the production process operational parameters settings, in order to reduce water losses: - a modification in the operational parameters of the water scrubbers settings in order to reduce water losses. . Furthermore, in the event of business interruption in the smaller manufacturing facility in Italy, we will follow our business continuity plan to temporary shift the small production volumes to our alternative approved facility (\$500 thousand) in Switzerland. In 2020 the major factory in Italy decreased the water withdrawals by 14% vs. 2019 and 30% of its water needs came from recycled water. In Indonesia, this is an estimated recurring cost for external providers called to assess flood and business continuity risk annually and the related staff costs. Flood risk assessments are undertaken at the site level to understand how vulnerable sites are to cyclones/local flooding events. Understanding the scale and nature of this risk and conducting a risk assessment, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events (\$1 million). In Poland, since 2013, several water efficiency, reuse recycling and conservation projects have been implemented (\$93 thousand including 2020 initiatives cost), including several modernization initiatives. In 2020 the implementation of water saving initiatives intensified, with additional 8 completed projects, expecting to yield another 4200 m3 in water withdrawals reduction per year (the total cost of these initiatives in Poland in 2020 amounted around \$25 thousand).

Comment**Identifier**

Risk 6

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Physical risks due to climate change could have adverse impacts both on quality and yield of the crops we use, such as tobacco leaf and cloves. Suppliers of tobacco leaf in Indonesia are exposed to physical climate change risks, with drought and flooding being most critical. Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature and precipitation. Specifically, in the markets where we source from located in the tropics and subtropics, and more vulnerable to climate change impacts, changes in precipitation patterns (too much or too little rain) could impact PMI's sourcing strategy due to crop losses, leaf quality degradation and supply chain disruptions. Clove is an essential raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves and PMI purchases 100% of clove supplies from Indonesian farms (purchasing about 18% of the total clove grown in Indonesia), making it a substantial market. Compared to tobacco in 2020, clove made up 27% of total volumes purchased in Indonesia. Clove is 100% rainfed, making it highly reliant on well distributed rainfall during the growing season. Yields fluctuate historically, with harvests varying up to 60% over a 4-year cycle. Climate changes causing conditions such as prolonged dry season and extreme rain events could impact clove growing areas and be detrimental to plant productivity and cause yield volatility. Combined these factors could result in significant crop losses for our suppliers, decreasing farmers' revenue and reducing the supply of tobacco and clove, as it has been experienced in the past particularly during El Nino events. El Niño and La Niña impacted growing areas can still produce cloves but with a significant reduction in volumes due to drought and flood cycles that are detrimental to the clove tree; crop is consequently sold at higher prices after market fluctuations. Indonesia being the main clove market and in a predominant position for commercial clove for kretek, any negative impact on clove productivity is material for PMI since alternative sourcing origins were assessed as not suitable for our products. Reduced availability could drive price increase, impacting PMI's manufacturing operations and business directly in relation to the fact that PMI is one of the biggest kretek cigarettes producer in Indonesia.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

4000000

Potential financial impact figure – maximum (currency)

14000000

Explanation of financial impact figure

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought for the specific case of Indonesia. The lower range of financial impacts derives from our comprehensive climate change risk assessment tool combined with the threshold defined for the substantive financial impact, resulting in an estimated 8% increment in production costs (applied either to the sourced volume or spend). The upper range reflects an estimated 28% increment in production costs based on our modelling projection and our climate change risk assessment tool (CCRA based on the IPCC and RCP8.5), of the expected climate change impact (worst case scenario) for this country. We estimated the relative magnitude between \$4-14 million per year while we foresee this risk in the short to long-term (>6 years) for the Indonesian growers due to supply chain disruptions arising from drought and flood events during the growing season and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions.

Cost of response to risk

93000

Description of response and explanation of cost calculation

As part of our tobacco and clove procurement strategy, we require all tobacco and clove suppliers to follow our Good Agricultural Practices (GAP), which provide water related risks mitigation through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including tobacco suppliers. PMI utilizes the LRA results to work with farmers to improve agricultural resiliency to flooding and drought like in Indonesia where the results of our 2020 LRA led to planning and implementation of interventions that will continue in the next years. Focus trial projects to mitigate the effects of drought impacts on cultivated crops were deployed in clove and tobacco growing areas. Drip irrigation systems have been tested with farmers in clove production to increase resiliency, reduce dependency on rainfall and avoid productivity losses. As a result, the physiology of the crop has been better understood and the water relationship including stress thresholds and optimal water uptake have been systematically tested and more efficient irrigation protocols, for more consistent productivity, derived. Another example is the improved water access through the drilling of deep wells for tobacco growing to ensure the continuous availability of water for crop irrigation and human consumption, to avoid potentially negative impacts linked to changing weather patterns, supported by a thorough investigation of the deep well's impact on the groundwater level. Drilling deep well has been positive in the provision of clean, drinkable water for the local communities as well as improved water for irrigation with a more reliable supply during dry spells. In order to ensure business continuity, PMI has substantial inventories of tobacco leaf which can help mitigate short to medium term impacts (up to 5 years). The cost of response is based on a \$93 thousand budget allocated to environmental projects in 2020 (related to climate change, water security and biodiversity) under the GAP program implementation in Indonesia. The engagement with tobacco and clove suppliers in crop management practices in Indonesia it is included in the cost of response. The expenditures represent approx. 2% of the 2020 global GAP budget.

Comment

Similar investment is expected over the next 10 years considering projected climate change and the potential scale-up of current projects.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact

Reduced direct costs

Company-specific description

By mapping energy consumption profiles of our manufacturing sites worldwide and available technologies, PMI has identified through its manufacturing engineering team, the opportunity to switch to renewables and implement renewable energy self-generation. The opportunity includes to potentially leverage on participation in renewable energy programs and adoption of energy-efficiency measures supported by national policy and sometime incentive schemes. From the mega trends, electrification and through the various stimuli to accelerate the transition to a low carbon economy it is anticipated that policy levers to reduce cost barriers for deployment of renewable technologies will be required. This is likely to include the introduction of subsidies for energy generation which have already been a feature in many markets and used successfully to support the commercialization of renewable technologies making them cost competitive with conventional alternatives. The scale of these subsidies and corresponding total cost of energy for renewables is expected to be higher under a 2-degree scenario (2DS). Subsidies for renewable energy self-generation in different countries are factored into our cost-benefit analyses for pertinent projects so that improved return on investment can potentially be delivered. Cost-Benefit analysis and renewable energy assessments have been performed in our facilities located in Italy, Turkey, Lithuania, Ukraine, Serbia, Greece, Indonesia, Romania, Philippines, Portugal, Switzerland, Brazil and Mexico. These analyses proved that not only PMI was able to decarbonize its energy needs by self-generating energy, e.g., through photovoltaic technology, use of sustainable fuel like biomass, but equally important to drive variability of energy costs and dependency down, and ultimately supporting our transition toward a low-carbon business model. PMI could access subsidies for renewable energy generation in its operations in different countries, for example in Italy and the Philippines, and any unused energy could be sold back to the grid, creating a new source of revenue for PMI as well as significant savings on energy costs. This is

embedded into our environmental strategy, annual and long range plans to increase the use of renewable energy in our manufacturing sites, increasing either self-generation and/or purchases. In 2020, the self-generation of electricity increased to 4% vs the overall PMI consumption.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

98000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The levelized cost of energy (LCOE) for renewable and non-renewable sources was modelled between 2017-2020, drawing from scenario data under 2-degree scenario. This LCOE metric is a useful summary of the lifetime cost of energy incorporating a range of factors (IEA's Fuel input electricity and heat generation (PJ), for biomass, hydro, geothermal, wind, solar PV, solar CSP and hydrogen) associated with the type of generating asset including subsidies. The LCOE has been used to compare the benefit of moving to renewables for energy generation, such as photovoltaic and biomass, with the current operational expenditure on energy at PMI sites assumed to remain constant in business as usual (BAU) scenario. This LCOE is applied to the current PMI operational energy spend to compare the cost of energy of the BAU scenario with a fully renewable uptake over the time horizon considered. The approximate financial impact of this analysis is based on PMI's global operations study results and estimations included in our 2019 Climate Change Risks and Opportunities Assessment. In the assessment PMI focused on the evaluation of physical and transition risks as per recommendation of the Taskforce on Climate-Related Financial Disclosures and the approximate potential financial impact estimated for this opportunity, in a 2DS, was that PMI would have a saving up to \$97 million. We also estimate the overall impact of subsidies for renewable energy generation to our various locations throughout the globe to be over \$1 million based on the incentives considered in the renewable projects planned.

Cost to realize opportunity

120000000

Strategy to realize opportunity and explanation of cost calculation

Self-generation of renewable energy is part of PMI's "carbon neutrality in manufacturing" strategy, which includes the increase in: - operational efficiency and elimination of losses; - use of renewable energy; - self-generation through investment in renewable energy. We apply technologies to generate renewable energy across our manufacturing sites, such as photovoltaic panels, biomass boilers, heat pumps, and tri-generation processes (combining cooling, heat, and power). Options to self-generate and/or purchase renewables are evaluated based on analysis of local facilities data, our Energy Management Program and regulatory radar screen. Decisions to mitigate climate-related transition risk due to increased cost to source energy for our operations is taken with the support of an internal shadow carbon price (\$65 per ton CO2e). PMI's shadow carbon price is an internal lever designed to accelerate carbon emissions reduction by ensuring that the company's investment decisions reflect all costs, incl. environmental ones. PMI's shadow carbon price is integrated into the financial evaluation and preparation of business cases that will impact our carbon emissions. In 2020 we installed pyrolysis technology in our factory in Switzerland, which generate syngas from operational waste to be used instead of fossil energies to produce steam and hot water. It will be operational in 2021, and we will communicate results in our next report. Another example, in 2020 our photovoltaic installation at our factory in Italy reached its full capacity, generating around 4% of the total energy used on the site in a year. In 2020, we reached a 34% of total energy consumption (incl. fuels and electricity) from renewable sources. This will contribute to achieve our target to use 100% of green electricity in our factories by 2025. We are on track on this target reaching 78% in 2020. These projects enabled PMI to increase the share of energy self-generated, decarbonize its energy needs, via photovoltaic technology and biomass, and to drive variability of energy costs and dependency down. We estimate a cost of management of \$120M (a set annual budget for CAPEX is approved by the PMI's Operations Management Team in a range of \$16-20M over a 6-7 years' timeframe), based on previous investments and number of facilities to switch to renewables. The cost to realize the opportunity is a range \$120M +/- \$20M: cost is the average between \$96M (\$16M*6 years) and \$140M (\$20M*7years).

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Upstream

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact

Other, please specify (Reduced dependency from fossil fuel and favorably impact farmers profitability and increased their resiliency)

Company-specific description

As cost competitive alternatives to fossil fuels become more readily available, it becomes attractive for tobacco farmers to switch to low carbon energy sources. Farms may become more efficient thanks to new technologies; if PMI continues to invest in programs to improve agricultural practices and encourage the uptake of low carbon equipment, farmers' expenditure on fuel and energy inputs will fall. The speed of fall in costs will depend on global trends in fossil fuel prices due to oil markets and implementation of carbon pricing mechanisms. A fall in costs of production should reflect increased revenues for the farmers. The reduced dependency of our tobacco supply chain on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in medium to long term. For PMI's the opportunity lies in intangible benefits such as enhancing its corporate reputation by minimizing its supply chain environmental impact. A good example is the implementation of PMI's Renewable Curing Fuel Program, which defines a best-practice approach to be implemented in all flue-cured markets, with a focus on the transition from fossil fuels to low carbon fuels and the implementation of barn improvement initiatives. The program results are globally monitored annually by a third-party, focusing on the compliance with our internal standard and fostering continuous improvements. Where the fuel transition results in a switch towards woody biomass, our standard prescribes fuel sustainability and traceability (i.e., from a sustainably managed forest). With the progressive implementation of our program suppliers have effectively transitioned to low carbon fuels for curing in many countries. Focus remains in countries where curing practices are still heavily dependent on fossil fuels, e.g., coal in China. Through a multi-stakeholder engagement, a pilot project was implemented in the provinces Guangzhou and Yunnan to progressively convert curing barns from coal to woody biomass, generating less dependency from fossil fuels but also contributing to significantly curb GHG emissions. The focus of incentivizing best practice in PMI's

supply chain responds to increasing interest for environmental issues from our stakeholders and could enhance PMI's reputation and create corporate value. Through investment in programs to improve agricultural practices, PMI is expecting to ameliorate farmers' conditions and resilience to climate change risks.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

110000000

Potential financial impact figure – maximum (currency)

225000000

Explanation of financial impact figure

The potential financial impact range represents an opportunity for suppliers and farmers in our tobacco supply chain due to decrease in farmers' costs of production and reflects the estimates of their potential increased revenues. The benefit sought by PMI is not financial, but rather to build stronger resilience within our supply chain by supporting farmers to switch from fossil to low-emission fuels and it is designed to remain with the farmers as part of the Good Agricultural Practice program. Through investment, engagement and collaboration in programs to improve agricultural practices, PMI is expecting to ameliorate farmers' conditions and resilience to climate change risks. The reduced dependency of our tobacco supply chain on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in the medium to long term. The range for the potential financial impact figures has been estimated as follows. Diesel price was modelled between 2017 and 2030 using the International Energy Agency (IEA) scenario data for projected oil price, and the assumption that the ratio between oil and diesel price will remain constant. According to an internal model, the cost of diesel to farmers as a portion of total cost of production was estimated on a pre-determined cost allocation used for similar agricultural commodities and using a proxy based on the diesel and oil prices from public data sources. The cost output was applied to the mechanization profile of PMI's farmer base (pro-rata based on volumes sourced yearly). This share was then applied to the current and future forecasted cost of production of tobacco farmers based on annual PMI purchased volumes. It was then assumed that tobacco farmers' cost of production would remain constant in a business-as-usual scenario and increase by the same rate as diesel price under climate change scenarios. The result after the application of the aforementioned calculation methodology, and factoring farmers' uptake of new technologies, renewables and future forecasted tobacco requirements, was that the potential financial impact of the opportunity for our tobacco suppliers and farmers globally could be in a range of \$110 to \$225 million per year. Taking in account our ambition to a carbon-neutral value chain by 2050, all emissions reduction within our scope 3 may have a potential financial impact in time. It has not been estimated due to the timeframe of the objective.

Cost to realize opportunity

5000000

Strategy to realize opportunity and explanation of cost calculation

Since 2002 PMI implements its Good Agricultural Practices (GAP), a program with mandatory requirements for our tobacco suppliers and their farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change. Strategic initiatives include the Renewable Curing Fuel Program with a focus on curing efficiency and switching to low carbon curing fuels, making tobacco suppliers and their farmers more resilient to price increments on fossil fuels. The reduced dependency on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in the medium to long term. The cost of response is based on a set yearly budget allocated to initiatives to promote the adoption of improved and innovative practices by the farmers in our supply chain. Within GAP program, such budget is approved on a yearly basis by the sustainable agriculture steering committee and to be accepted it needs to demonstrate clear impacts on the climate footprint of the company in line with the strategy to decrease the use of crop inputs without influencing negatively farm outputs. Due to force majeure causes linked to the Covid-19 pandemic, only 57% of the total budget approved has been utilized in 2020 totalling about \$5 million. PMI plans to maintain similar level of investment over the next 10 years. The focus of incentivizing best practice in PMI's supply chain responds to increasing interest for environmental issues from our stakeholders and could enhance PMI's reputation and create corporate value. Moreover, through investment in programs to improve agricultural practices, PMI is expecting to ameliorate farmers' conditions and resilience to climate change risks, strengthening our engagement and collaboration with them. In 2020, gradual switch to renewable sources and improved barn efficiency led to: - 67% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in PK, PH, IT, SP, MW, MZ, MX, BR and AR) - 45% of the fuel was sustainably sourced firewood (22% other biomass) - flue-curing GHG emissions intensity was 77% lower in 2020 (vs. 2010) - reduction of 240,204 tons of CO₂e (vs. 2019) - increased collaboration with PMI Leaf suppliers strengthening working relationship and fostering additional collaboration on climate change related risks, and in other areas that may have a positive impact on our business and share value with society.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Upstream

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify (Insetting represents the actions taken by an organization to fight climate change within its own value chain in a manner which generates multiple positive sustainable impacts.)

Primary potential financial impact

Other, please specify (Benefit to operating cost and supply chain value creation.)

Company-specific description

In 2020, PMI strengthen its ambitious goal: to be carbon neutral by 2030 for Scope 1 and 2. PMI implemented a carbon levy to support its 2030 goal through compensation of unavoidable Scope 1 and 2 emissions, supported by Science Based Targets as guiding principles. PMI's carbon levy is used to virtually charge selected business units for their respective GHG emissions and establish an internal fund to finance the strategy of the Portfolio of climate investments that focuses on high quality GHG emission reduction projects within PMI's supply chain (insetting projects) as well as purchasing of quality offsets. PMI will prioritize the development of insetting projects that are aligned with its Good Agricultural Practices (GAP) program and that promote sustainable development in line with the company's priorities in the fields of climate, forest conservation and/or reforestation, water, low carbon agriculture, household projects or others. An example of an existing project concept is PMI's work in

Mozambique, where farmers and their communities traditionally rely on the use of firewood to sanitize fetched water to drinking water, resulting in GHG emissions. PMI is contributing to the provision of access to safe and clean water by establishing and rehabilitating boreholes with solar pump technology in its farmers' communities, which besides contribute to GHG emissions abatement. The carbon credits generated through insetting projects will be primarily used by PMI to compensate those unavoidable Scope 1&2 emissions (e.g. which are not currently possible to reduce due to technical or financial viability). In the absence of insetting projects, PMI would need to acquire carbon offsets in the international market, being exposed to market volatility, particularly in the context of the implementation of CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) and the related expected impact in terms of carbon credit demand. The insetting projects represent an opportunity for PMI to be more resilient to market volatility, potentially harvesting benefit in terms of operating cost, as well as to generate co-benefits in the supply chain. PMI is planning to start implementing insetting projects in 2021 with a delay of one year on the schedule caused by restrictions related to Covid-19 pandemic, prioritizing farmers with the highest needs of water management practices, climate change adaptation and co-benefit potential.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

1000000

Potential financial impact figure – maximum (currency)

10000000

Explanation of financial impact figure

We aim to reduce our absolute GHG emissions through efficiency improvements and investing in renewable energy sources and use compensation measures as a last resort. Based on our estimation, for PMI to become carbon neutral for scope 1 and 2 by 2030, a consistent amount of credits for an unlimited period will be necessary. Aligned with our carbon neutrality objective for scope 1 and 2 emissions by 2030, a sustainable business strategy was first defined in 2019 leveraging on the implementation of insetting projects. PMI's 2020 direct emissions accounted for 412,999 tCO₂e. Based on our emissions reduction strategy scenarios and simulations, we calculated our potential financial impact on 200,000 tCO₂e/year by 2030. PMI is not willing to invest in large scale renewable projects generating millions of credits (e.g., hydro in India, China or Brazil) due to their relative distance from our tobacco supply chain in terms of benefits and their lack of positive demonstrable impact on the natural ecosystems. Attention will be focused more to small-medium scale ecosystem interventions in the field of Voluntary Emission Reduction scheme, with credit prices ranging between \$5 and \$50 depending on the biodiversity and social benefits embedded in the project outcomes. To fulfil our carbon neutrality commitment in 2030, we would need to invest between \$1 million (200k * \$5) and \$10 million (200k * \$50), taking into account the likelihood of price inflation and considering future volatility of the market with the upcoming implementation of CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation). By investing in a portfolio of insetting projects, PMI aims to generate the credits required at a fixed price. The strategy will be based on three main strategic initiatives, Nature Based Solutions, Supply chain and Community projects and Technological climate solutions. Each initiative is different in complexity, execution time and quantity of offsets generated per dollar of investment, the objective of the portfolio is to design the investment mix to fulfil the offsetting needs for Scope 1 and 2 while promoting technological evolution in the field of carbon removal cascading the co-benefits as much as possible on PMI's supply chain and especially its rural communities. It is important to note that the financial impact mentioned here doesn't take into account all the co-benefits related to reputation, compliance, supply chain resilience to name a few of them.

Cost to realize opportunity

6000000

Strategy to realize opportunity and explanation of cost calculation

To realize this opportunity, in 2020 we further developed the concept of an insetting project that would provide access to clean and safe drinking water to rural communities within the tobacco growing areas of Mozambique, where tobacco farmers part of PMI supply chain are located. The project is in line with our water, access, sanitation, and hygiene (WASH) program, and will also benefit the schools we support through school feeding initiatives. We determined that the best approach would be to pilot 10 water access sites, building or rehabilitating boreholes with solar pump technology, to determine how well the selected technology works within the local context and its potential to scale up. Ideally, the project will qualify for certification by the Gold Standard Foundation, thereby generating internationally recognized verified emission reductions, which over time will compensate our residual direct emissions and contributing to achieve PMI's carbon-neutrality target for Scope 1 and 2 by 2030. According to our feasibility assessment, the installation of 10 boreholes could benefit around 35,000 beneficiaries and avoid 865,000 tons of CO₂ emissions over 10 years, providing approximately 245 cubic meters of safe drinking water per day. We have defined our approach and we have been forced to delay the start of the project implementation due to Covid-19 pandemic related restrictions, our aim is to report on its progress next year. The co-benefits of such project(s) are: - to strengthen our supply-chain not only by providing co-benefits to the beneficiaries but also by being more resilient toward water related issues; - to align our strategy with international expectation such as the Paris Agreement, by taking ownership of our carbon neutrality ambitions, by being self-sufficient in carbon credit generated and cost-efficient; - to demonstrate leadership by internalizing the cost of externality due to climate change. The cost provided is an estimation for a set budget (i.e., we set a single investment amount into the program and it is not possible to provide a breakdown) to be allocated to the initiative, as the project is still under development and not finalized yet. We estimate the cost to be approx. \$6 million which will include the cost of building the boreholes (geological survey, pilot drilling, preparation work and construction), the solar pump technology, the management, monitoring and certification fees.

Comment

In our strategic approach, we are also monitoring closely Nature-Based Solutions to support carbon removals that will further contribute towards our journey to achieve our long-term target of our whole value chain to be carbon neutral (GHG Scope 1, 2 and 3) by 2050. At the moment we are focusing on avoided deforestation in Brazil's Mata Atlantica, in reforestation and improved forest management in Argentina and in scoping a joint initiative with our farmers in the Philippines related to better forest management practices to sequester carbon versus a calculated baseline.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Reduced direct costs

Company-specific description

PMI has a history of successful packaging innovation, and packaging is an important aspect of sustainable design (i.e.: eco-design). With respect to our smoke-free products, our 2025 eco-design and circularity ambitions related to packaging, aim reducing the carbon footprint of smoke-free products in line with our science-based targets. In packaging, more than 90% of our materials were paper and cardboard in 2020. The primary function of packaging is to contain and protect products from the point of manufacture to the retail store or end user, as well as to provide product information. We are addressing our packaging strategy with a multipronged approach, including awareness-raising training for our Pack developers, ongoing research into alternatives to plastic based packaging, and improved design of packaging. Governance of eco-design and circularity is guided by our design and development teams and is fully embedded within our innovation process, including regular checkpoints with senior management. We are committed to evaluating sustainability characteristics and making design choices that will continually enhance the performance of all our products and packaging. Life cycle assessment (LCA) and/or other relevant environmental assessments are performed prior to launch of any new product and results presented in internal decision-making forums, in accordance with our sustainable design governance programs. Research are constantly performed on packaging design to identify new technologies and materials that could enhance the overall sustainability of our smoke-free product portfolio as well as conventional portfolio. Internal cross-functional teams are already hard at work establishing these innovation pipelines. As an example, we are actively working in developing an innovative packaging design solution for our smoke free products addressing material consumption by lowering the weight and the number of secondary packaging components in use, through packaging material substitution. This initiative estimates a potential magnitude of packaging components reduction of 16% of complete bundle, including packs and outer, as well as 67% of pulp-based material weight consumption, and 57% of plastic packaging weight consumption. As a return, by lowering the total consumption of secondary packaging requirements through complete redesign, we shall optimize the CO2 footprint of our smoke free products by approx. 1500 tons of CO2e.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

8900000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

As we are reducing the total amount of packaging requirements to produce the same amount of smoke free products, we are generating financial savings. The yearly potential financial impact of the opportunity relies on the SVC (Standard Variable Cost in \$ per thousand of smoke-free product units) variation between current solution and innovation applied to the market contemplated number of smoke free product units. Based on volumetric price of materials involved in both new and current solutions factored by the yearly consumption of smoke-free products Stock Keeping Unit (SKU) selected, we modelled expected savings resulting in a magnitude of \$8.9 million. [(current material price per Kg * current material quantity per SKU – new material price per Kg * new material quantity per SKU) * SKU volume = savings i.e.: \$8.9 million. Formula example with generic numbers: [(\$10/Kg*100Kg) – (\$9/Kg*80Kg) * 100 000 SKU = \$28,000,000]

Cost to realize opportunity

5800000

Strategy to realize opportunity and explanation of cost calculation

Following Management validation of the proposed innovation solution and associated business case that is expected within the next 6 months, our engineering, procurement and manufacturing solutions teams, as well as our suppliers of direct material and packing machinery, will collaborate to realize this project following our standard stage gate process. PMI will implement the standard Industrialization Stage Gate process which includes: detailed specifications creation, involvement of supply chain partners, Capex activation and machine park upgrade, manufacturing and quality deployment process through quality and machinability tests and last but not least validation protocols. When it comes to Capex, investigations were conducted by our Engineering Solutions teams in collaboration with OEMs [Original Equipment Manufacturers] which packing machines are used for the production of our smoke-free products to identify the magnitude of machine modification required to implement this packaging change ensuring the highest level of quality, runability and machine efficiency. The results of these costs investigations at machine level in the ideation stage is estimated at an average of \$96.7 thousand per machine and is then multiplied by the number of respective machines in use [60] in our affiliates for the packing process of our smoke-free products which would be part of the project (i.e.: at the moment estimated 60 machines * \$96.7 thousand in average per machine resulting in about \$5.8 million). Through all these preparation and machinery upgrade actions, we shall then be in the position to deploy the new innovative secondary packaging solution, bringing estimated consumption reduction of 67% of pulp-based material weight, 57% of plastic packaging weight, cost optimization of \$8.9 million, and CO2 emissions reduction by approx. 1,500 tons of CO2e.

Comment**Identifier**

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced direct costs

Company-specific description

Driving energy efficiency is core to our strategy. Transition toward a low-carbon business model is a priority within PMI strategy to achieve our carbon neutrality objective and deliver financial productivities. Our activities in this area center on our Drive for Zero (D4Ø) global program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also

promote behavioral change through our Zero Loss Mindset program. To support our D4Ø program, an Energy Saving Initiatives (ESIs) program has been started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects. In line with the implementation of our internal carbon pricing approach, the application of an internal shadow carbon price improves the ROI of the project facilitating the approval when presented to senior management. The opportunity of embracing new technologies and discontinuing obsolete ones present several benefits among which but not limited to: - improved financial productivity in the medium-long term, even more considering the increasing energy requirements due to the ramp up of production of our smoke-free products which are more energy voracious than conventional products; - enhanced opportunity in trading schemes. New technologies are fast evolving and requires thorough and continuous monitoring to seize opportunities. We recognize that more energy is required to produce IQOS heated tobacco units compared with cigarettes, with a consequent increase in greenhouse gas emissions. We are seeking to reduce this impact through these appropriate investments.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

30000000

Potential financial impact figure – maximum (currency)

40000000

Explanation of financial impact figure

The PMI's energy dashboard tool includes more than 500 energy saving projects with the potential to be implemented in our factories. The financial impact of such opportunity considers the financial savings of the projects' implementation calculated in the PMI's energy dashboard tool, which has been estimated between \$30 million and \$40 million as aggregated total estimated figures. The enhanced productivity in our manufacturing sites triggers saving related to energy and water annual consumption costs. In order to evaluate relevant financial saving as well as capital and operational expenditures, prior project implementation, we take under consideration data input and assumption such as costs of energy in the countries where we operate and expected reduction in energy consumption, estimation of technical performance for equipment and/or intervention and cost of technologies and/or intervention. To calculate the financial impact, we have used the total quantity of expected energy saved factored with the average cost of energy relevant to the various jurisdictions where PMI operates (€GJ saved x average cost €/GJ). At 2025 we expect to save approx. 1.5 TWh from these initiatives. The potential of trading surplus of carbon credits allocated to PMI in Cap & Trade schemes (such as EU ETS for example) has not been quantified due to the upcoming changes with phase IV of the EU-ETS and has not been accounted for in that case. The financial impact range is provided by the sum of the lower brackets estimates (\$30M) and the higher ones (\$40M).

Cost to realize opportunity

77000000

Strategy to realize opportunity and explanation of cost calculation

Driving energy efficiency is core to our carbon neutrality strategy in manufacturing and to deliver a step-change in financial performance to PMI. Under D4Ø program, and the Energy Saving Initiatives (ESIs) program, each PMI factory have been reviewed and prioritized. The ESIs program started in 2019 and includes 3 waves: - Wave 1 focuses on the top 15 factories with the highest energy footprint and ESIs with return on investments (ROI) below 3 years to leverage on quick win projects; - Wave 2 covers all factories and ESIs with ROI below 4 years and include every projects subject to save energy within our manufacturing sites portfolio; - Wave 3 looks at energy savings and energy efficiency technologies with a longer ROI (generally between 3 and 8 years), e.g., process heat recovery, and disruptive technology which will further drive our factory toward carbon neutrality. The ESIs wave 1 and 2 program includes more than 500 projects globally, e.g., LED lighting, HVAC upgrade, chilled water optimization and heat recovery. The cost to realize this opportunity is based on the deployment forecast of the 3 waves for the next 3 to 4 years with an objective to have them all implemented by end of 2025 and contribute to deliver substantial energy saving equivalent to more than 56,000 t/CO2e reduction. The \$77 million cost to realize the opportunity covers the full D4Ø program including ESIs program for all the PMI's manufacturing sites globally, and behavioral change trainings seeking to empower every worker to look for losses and recommend and implement solutions. The cost is a set budget for the sum of all projects and it is not possible to provide a breakdown by initiative. The cost is revised periodically by Operations management team due to the routinely assessment of several parameters such as specification changes, prioritization, re-estimation based on technology evolution and fuel prices. We applied the PMI's shadow carbon price (\$65 per ton CO2e) to assess and prioritized 13 projects to drive the implementation of technologies with the higher impact in CO2 emissions reduction. In 2020, the program triggered more than 140 projects worldwide, ranging from chilled water optimization, heat-recovery projects, and LED lighting to heating, ventilation, and air conditioning system upgrades. Overall, our efficiency initiatives and behavioral changes helped drive around 10% reduction in carbon emissions across our manufacturing facilities in 2020 versus 2019.

Comment

We recognize that more energy is required to produce IQOS heated tobacco units compared with cigarettes, with a consequent increase in greenhouse gas emissions. We are seeking to reduce this impact through these appropriate investments. Our initiatives don't apply solely to our manufacturing sites, in our tobacco supply chain we focus on three areas: reducing fuel consumption by improving curing-barn efficiency, promoting the switch from fossil fuels to biomass fuels, and ensuring sustainable and traceable firewood (leading to an absolute reduction in in 2020 of 240,204 tons of CO2e versus 2019); in this opportunity here we only accounted the impact in our direct operations.

Identifier

Opp6

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient modes of transport

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

PMI runs an extensive fleet of approximately 23,000 vehicles, among which 75% are working tool cars (WTC), to support the day-to-day business whilst the remaining are benefit cars assigned to defined seniority grades within the company. WTC are assigned to employees that use them for an average period of four years before the leasing

contract ends and the car is replaced with a new one. Our estimated mileage is around 400 million kilometres a year for the entire PMI's fleet. Typically, WTC are medium sized passenger cars run on either gasoline or diesel fuels and their characteristics need to lead to an efficient match between usability, driving comfort and performance in terms of safety, durability, and economy. In 2020, leveraging on technological improvements achieved by the car industry in the field of passenger cars CO2 emissions, PMI decided to evaluate the possibility of investing in renewing lease contracts by switching the drivetrain choice for WTC to hybrid technology and in particular to full hybrid system. The opportunity considered PMI's internal carbon price of \$65/ton of CO2 emitted as one of the factors to compare the full cost of ownership impact and therefore the potential savings of a hybrid vehicle vs. an internal combustion engine. The investment assessment led to a case assessment on converting the WTC fleet in Taiwan to full hybrid starting from 2021. We plan to apply the same approach to the global PMI's fleet aiming at a progressive full conversion to lesser polluting and better cost performing vehicles not only for WTC but also for benefit cars with a target of having 50% of our WTC as hybrid or even less polluting drivetrains by 2025. The benefit will be twofold, i) a positive impact on the overall emissions for Scope 1 for fleet that will follow the reduction curve defined by lower emissions linked to hybrid technology, ii) increased savings on operational costs due to the reduced fuel consumption and in many geographies also tax liabilities that lower emission vehicles are subject to.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

900000

Potential financial impact figure – maximum (currency)

12200000

Explanation of financial impact figure

For the Taiwan experience two gasoline powered car options have been compared with a full hybrid alternative. The hybrid powertrain was chosen for a compact model that was compared with two lower segment subcompact alternatives. The hybrid resulted in 30% and 34% less CO2 emission on a yearly basis with an equivalent decrease in fuel consumption compared to the gasoline options. For the calculation of the cost saving from switching drivetrain we added the cost avoidance of choosing a lower emission car by multiplying, as a cost component for investment decisions, the additional tons of CO2 emission of the gasoline car by the internal carbon price PMI has set; PMI internal carbon price is \$65 per ton of CO2e avoided. Considering the better mileage of the hybrid car and adding the impact of the internal carbon price to the more emitting gasoline cars, overall, each hybrid car guarantees a saving in total cost of ownership per year quantified in approx. \$150. The work in Taiwan included a relatively small fleet of 51 cars which brought to PMI over \$7 thousand in cost saving and over 50 tons CO2 of reduced emissions to be accounted for in Scope 1, we consider this to be a proxy for the lower estimate for our cost saving estimation on the total car fleet of PMI at 2025 totaling \$ 900 thousand. A similar case in Australia led us to a different reduced cost estimation due to price dynamics for the lease car market. After one year of running a part of the WTC as hybrid we could estimate an average reduction of CO2 emissions of 33% and a decrease of consumption of 47% compared to the full gasoline cars. This resulted in a reduction of total cost of ownership (including the impact of the internal carbon price applied to both vehicles and favoring the hybrid) of \$2.5 thousand per car. We consider the Australian results as a proxy to calculate the upper range of the potential financial impact and applying it to the conversion target PMI has for 2025, we estimate a saving of \$12.2 million.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Driving efficiency in reducing CO2 emissions is key in all business areas of PMI that contribute to its carbon footprint. Working tool cars (WTC) do not appear in the top5 CO2 contributors of the company footprint, however their emissions are really important to address because they constitute a daily and constant impact to the environment. Tackling WTC emissions is a tangible action and demonstration of sustainability leadership, as well as it is an important driver of behavioral change since cars are part of the daily routine of the majority of the markets where PMI operates. Transformation strategies start from behavioral changes and PMI wants to be a catalyst in each area of improvement, we have a three-step approach to improving our CO2 performance with regards to our fleet: - optimize fuel consumption and fuel efficiency via eco driving training and telematics; - switch to use of alternative power drive trains and minimize the use of fossil fuels; - offset remaining unavoidable GHG emissions. In 2020 we have updated our company car policy prioritizing the lease of hybrid and electric cars over more polluting internal combustion engines, the application of the new policy is global on both WTC and benefit cars, driving the establishment of a less CO2 emitting car fleet across all the geographies. Switching to hybrid and electric cars will bring a benefit in terms of CO2 emissions as well as cost reduction for the ownership of the vehicles. Significant progress has been achieved in making accessible alternative powertrains, like hybrid, to users at a cost competitive leasing structure compared to petrol/diesel engines; we estimate no cost impact in converting our fleet to hybrid. The residual value of hybrid cars in several markets is already higher than that of equivalent gasoline cars making the lease contract of the former more convenient. The conversion will be gradual for two reasons: i) the residual leasing time we will have to complete for petrol vehicles contracted after 2017; ii) the unavailability of hybrid vehicles respecting all the PMI's criteria for eligibility as WTC in some markets. The incorporation of the internal shadow carbon price, \$65 per ton of CO2e, to the calculation of the cost saving opportunity provided further support to the approval of the policy for the conversion. The roadmap defined has the aggressive target of having at least 50% (2020, 4.7%) of WTC converted to hybrid or even less polluting drivetrains by 2025.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	PMI has been developing its organization's low-carbon transition plan. PMI intends to communicate publicly its organization's low-carbon transition plan in 2021. Internal discussion is ongoing to consider the document for inclusion as a scheduled resolution item at the Annual General Shareholders' Meeting in the future.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
2DS RCP 4.5 RCP 8.5 Nationally determined contributions (NDCs)	PMI has used climate-related scenario analysis in different occasions starting from our 2015 climate change risk assessment (CCRA), to the integration of it in 2019 with TCFD recommendations to provide transparency on the financial impacts of the evaluated scenarios (2DS, NDCs, RCP 4.5 & RCP8.5) always following a consistent process to assess the importance of climate change risks and opportunities (CCRO) to PMI business. The process included key assets such as factories, supplier's processing facilities and tobacco growing regions. Information was sourced from the Coupled Model Inter-Comparison Project - Phase 5 (CMIP5). This assessment focused on the evaluation of future climate change impacts to an updated list of 85 key PMI facilities and supply chain nodes (ports, tobacco growing areas and direct materials) to reflect PMI's structure. In 2017, 2DS scenario informed PMI's business strategy by serving as a benchmark to set up our Science Based Targets (SBT). We mapped 149 CCROs and then divided them according to PMI's categories: proactive, reactive, nonmaterial, watch & quick wins. It was decided to prioritize the proactive CCROs, as they have the highest certainty and materiality levels. For 18 CCROs we analyzed, the estimated financial value-at-stake under two climate scenarios – 2DS in alignment to the Paris Agreement goal (below 2°C) and a reference policy scenario (RS) based on the pathway outlined in RCP 4.5 and including policies aligned to the achievement of NDC. The chosen time horizon considered projections for the 2030 timeframe under the 'high emissions' scenario RCP8.5 to prepare PMI for medium-long term major physical CCRO and it also defines the timeframe for assessing opportunities for new tobacco growing areas. The 2DS scenario informed PMI's business strategy by serving as a benchmark to set up our SBTs (time horizon 10 years, by 2030), thus their relevance. The areas considered in the analysis included Sustainability and environmental focused teams, Risk & Insured losses, External Affairs, Science & Innovation. The outcome of the CCRA, especially the potential exposure of tobacco farmers and PMI's factories to water stress, supported several decisions among which to develop a local water risk assessment tool for our tobacco growing areas to better understand local risks and drive mitigation actions, as part of our Good Agricultural Practice program. To implement Alliance for Water Stewardship standard in our factories with the objective to certify all of them by 2025 (11 sites certified by 2020), aiming to further mitigate risks and enhance stakeholders' engagement in the catchment area. To invest in factories where local risks have been identified, e.g., droughts in AR, BR, ID and PH. Implementation of above processes and findings enabled our strategies to focus on and prioritize initiatives in collaboration with our tobacco suppliers that had not yet in place a mitigation strategy aligned with our scenario analysis, e.g., practices to reduce water consumption at farm level in ID and PH. The application of the strategy has led to less stress sensitive tobacco growing areas and more stability in PMI's tobacco sourcing strategy. One of the CCROs resulting from our analysis was the increase in drought in countries like Brazil, informing PMI's tobacco sourcing strategy to geographies that will be less impacted by climate change. In 2020 tobacco volumes were significantly impacted by extreme weather events, causing relevant crop losses to contracted farmers in BR (over 2,300ha of production were impacted due mainly to drought events in Brazil alone). Farmers' losses were volumes already contracted by PMI which had to adopt a contingency plan searching for alternative volumes in a short time window thus reducing the power of negotiation and potentially impacting the price above PMI's threshold of \$5 M.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	For PMI, sustainability means creating long term value while minimizing the negative externalities associated with our products, e.g., through Lifecycle Assessments (LCAs), new product and packaging design. Following a more in-depth CCRO assessment aligned with the TCFD recommendations, we evaluated climate risks and opportunities in relation to our Products & Services, such as shifts in supply & demand and downstream market risks associated with shifting consumer demands for lower-carbon products. In 2020 we conducted market-research studies with our RRP consumers and legal age smokers; results indicated that environmentally friendly products and services have an impact on purchasing decisions and represent an opportunity for us to accelerate our transformation into a smoke-free future. Results from these studies allowed PMI to carry out a cost/benefit analysis to design and commercialize more sustainable products and services, used to inform a roadmap for our RRP products, prioritize initiatives, influencing PMI's long-term strategy. Climate-change influences setting of sustainability targets for our products and services at the short and medium term. To control environmental and social impacts across the life cycle of our smoke-free products, we set our 2025 eco-design and circularity ambitions, which extend to electronic devices, accessories, consumables, and packaging, incl.: - provide access to collection and recovery for device and its consumables to all IQOS users - Continue to reduce the carbon footprint of our smoke-free products in line with our science-based targets - Achieve eco-certification for all our PMI smoke-free electronic devices introduced on the market as of the end of 2025. Potential benefits include energy savings, reduced use of natural resources, waste reduction, and, typically, a longer product lifespan. In 2020 we spent approx. \$350k on LCAs focusing e.g., to change the battery technology for our IQOS charging units. Our new battery chemistry offers the same performance with a reduced carbon footprint versus our previous version. This change was incorporated in the IQOS 2.4+ and IQOS 3 DUO chargers, resulting in a 9% reduction in the product's CO2 footprint. To achieve our 2025 eco-design ambition, as we release new product versions, we will keep improving battery technology to further reduce emissions and product's footprint.
Supply chain and/or value chain	Yes	Physical climate change risks could affect, with a medium impact, our own operations and those of our suppliers globally. Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality and availability of key crops, such as tobacco leaves and cloves, changing our buying patterns and increasing operational costs. Increased drought/flooding could disturb the tobacco leaf life cycle stages in several countries from where we sourced from in 2020, driving strategy interventions in impacted areas. Flooding may require pumping of excess water; similarly, extreme droughts may require long-term irrigation, increasing energy consumption and production costs. The financial implications of these risks vary depending on the impacted asset. E.g., in our tobacco growing areas in Brazil and Philippines they could cause interruptions in our supply chain with a financial impact ranging from \$3 million to \$17 million. To prevent these impacts from materializing, PMI has adapted its management strategy at the short-medium term. We take into consideration those risks in the strategic decision and annual planning of our tobacco leaf inventories which can help mitigate short to medium term impacts. To support addressing these risks PMI embedded environmental sustainability considerations in Good Agricultural Practices (GAP) and Responsible Sourcing Principles (RSP) since 2002 and 2017 and required suppliers to comply with them. PMI actively engages with its suppliers and we plan to embed the elements of our carbon neutrality strategy in the programs with our suppliers as we move to the achievements of PMI's targets for 2030. In the strategic decision and annual planning of our tobacco leaf inventories we include consideration on the impact that GAP initiatives had since its implementation to mitigate those risks and its increasing influence over time in the short to medium term. e.g., PMI has invested around \$500k in 2020 to support farmers in Brazil, the Philippines and in Indonesia with more efficient technologies (e.g., drip irrigation) contributing to climate change mitigation efforts. In the long-term our business strategy focuses on physical adaptation and long-term emissions reduction in accordance with our approved Science-Based Targets, based on 1.5°C pathway, to reduce our value chain absolute carbon footprint.
Investment in R&D	Yes	Increasing climate change risks consumers' awareness can generate fluctuations in supply & demand and create downstream market risks and opportunities associated with shifting consumer demands for lower-carbon products. In 2020 we conducted market-research studies with our RRP consumers and legal age smokers (LAS) to quantify their Heated Tobacco Units (HTUs) disposal behavior and impact on purchasing decisions linked to perceived environmental issues, including climate change. Results enabled a cost/benefit analysis to develop and commercialize more sustainable products and services that will be used to build a long-term roadmap for our RRRPs and prioritize our initiatives. Product eco-design and circularity is now integral part of our R&D work and embedded in our long-term strategy to support our smoke-free future vision. With respect to our smoke-free products, in 2020 we set our 2025 eco-design and circularity ambitions, which extend to electronic devices, accessories, consumables, and packaging. In the area of product innovation, we aim to have all our new electronic devices commercialized as of end 2025 certified to validated standards for eco-design. We are also working toward the inclusion of recycled content in all devices by 2025. In our operations, eco-design principles inform how we use life-cycle analysis (LCA) to assess the comparative carbon footprint of our products, from tobacco sourcing to end-of-life impacts. We have analyzed IQOS devices, heated tobacco units, and packaging. In 2020, we finalized the results for our new e-vapor product, IQOS VEEV. This new version has a lower carbon footprint due to efforts to reduce the overall product size and decrease material use. We are working to close the gap between combustible and smoke-free products, in terms of carbon emissions intensity, through intensive R&D in improved manufacturing processes, extending the usable life of our electronic devices, and decreasing the total CO2 footprint through innovative material selection guided by the application of LCAs and eco-design practices. Over the past two years, we have reduced the overall CO2 impact of our smoke-free products through improvements in manufacturing processes and in our tobacco supply chain. In 2020 we spent over \$350k working with external agencies on product LCAs, (development and implementation of sustainable design program).
Operations	Yes	Beyond its human repercussions, climate change threatens business continuity, especially where businesses involve agricultural supply chains. For PMI, raw material costs such as tobacco leaf and cloves may rise, with consumers and our employees becoming increasingly sensitized to environmental impact of corporate actions. Upfront investments with longer-term returns are required as consequences of climate risk could expose investors to changes in corporate stock value. PMI's efforts to reduce GHG, e.g., through increased energy efficiency, could alleviate potential costs and create competitive advantage by meeting or exceeding consumers, employees, and other stakeholders expectations. In 2020, our assessment results on current updated societal expectations, made us confirm our ambitious targets to guide on decarbonization: - Achievement of carbon neutrality of PMI's direct operations (scope 1+2) by 2030 with the ambition to anticipate it by 2025; - Achievement of carbon neutrality of PMI's value chain (scope 1+2+3) by 2050 - a reduction in absolute CO2 emissions consistent with SBTi for a 1.5-degree submitted and validated in 2020. Our climate change strategy has a key role in the medium and long term to enable efficiencies in our operations, to keep us ahead of our competitors, increase our resilience and to fulfil our reduction targets for a better strategic position when customers/investors assess our performance. Our business strategy focuses on physical adaptation and long-term emissions reduction including: - long-term sourcing strategies integrating CCROA considerations - customer and supplier sustainability strategies aligned with ours to ensure support to our objectives. Our strategy and decisions are influenced by understanding and adapting to potential future climate change issues and by minimizing our environmental impact. We integrate climate related physical and transition risks and opportunities related to regulation, reputation and market by implementing carbon emission reduction projects with longer payback period in our facilities, sourcing voluntary green electricity to decrease our dependence from fossil fuels and reduce our carbon footprint, among others. One example is the decision to implement energy saving and CO2 reduction projects in our facilities delivering a 16.6% reduction on scope 1 and 2 emissions between 2019 and 2020.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

Financial planning elements that have been influenced	Description of influence
<p>Row 1</p> <p>Direct costs Indirect costs Capital expenditures Capital allocation Assets</p>	<p>A clear international trend towards increasing and stricter climate-related regulations exists. Compliance with such policies and regulations are core to the way PMI operates. While in some circumstances compliance with country-specific legislation increases operating costs, it also provides PMI with the opportunity to reduce energy consumption, CO2 emissions and operational costs. PMI has adapted its financial planning to address climate risks and seize opportunities related to direct and indirect costs, capital expenditure and allocation, and assets in the short (0-1 year), medium (1-5 years) and long- time horizons (5-15 years). Some examples of how financial planning has been influenced by climate-related risks and opportunities include: - renewable energy generation subsidies are factored into our cost-benefit analyses to improve return on investment, estimated to be over \$1M throughout our global operations and is already implemented in our sites like in Italy, Turkey, Lithuania, Ukraine, Serbia, Greece, Portugal, Indonesia and Mexico; - schemes such as the EU Emission Trading Scheme (EU ETS), which covers in 2020, 3 PMI owned and operated factories in the Netherlands, Romania and Italy. The expansion of the EU ETS to include EU accession countries where PMI has facilities have influenced our investments with energy saving initiatives and Drive for Zero; e.g., since 2019 in Romania we are working with an allocated budget of \$1M to that. This provides us with the opportunity to apply our experience in these new countries or other regions considering introducing similar schemes; - energy taxes, such as in Germany, incentivized us to implement an Energy Management Program according to ISO 50001, saving us an estimated \$800k in energy tax reductions. For our global operations, such levies and taxes are estimated at around \$2M. The transition risk of increased production costs for farmers due to changing input prices, specifically diesel costs, has been evaluated as having a potential medium to low impact in the long term on tobacco procurement expenditure o from third-party leaf suppliers and directly contracted farmers. Diesel is widely used in many farming practices. PMI's supply chain and its purchases of tobacco leaf are influenced by the cost of production for farmers, with mechanized activities at field level (i.e., dependent on diesel) for approximately 80% of our purchased volume. Energy is a significant cost in farming practices in relation to the mechanical equipment used. If diesel prices increase the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result. This in turn would cause an associated indirect increase in procurement costs as the price of tobacco would respond to upward pressure on the cost of production, based on surveyed data collected from farmers with diesel expenditure representing up to 10% of the overall cost of production. A key factor in diesel prices is global oil prices, which are expected to have different developments depending on the transition pathway taken at a global level. Under transition pathways aligned to 2 degrees scenario or below, the oil demand will be lower than under scenarios associated with greater temperature increases. As such the expected increase in oil prices and indirectly tobacco prices paid by PMI is lower in a 2-degree scenario. Since 2002 we have been implementing the Good Agricultural Practices (GAP) program. GAP is a program with mandatory requirements for our tobacco suppliers and their contracted farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change such as transition market risks related to fuel prices increase. A set annual budget is allocated to initiatives to promote the adoption of improved and innovative practices by the farmers in our supply chain lowering fuel consumption, dependency on fuel and overall production costs. Over the past years, the raising attention of PMI to mitigate climate change related risks influenced our financial planning and resulted in an increase of the yearly allocated budget to support farmers in its supply chain to improve their resiliency and seize opportunities in the low carbon economy. Strategic initiatives include improving efficiency and reducing mechanized activities at field stage, improving tobacco curing efficiency and switching to low-carbon energies, and thus making tobacco suppliers, their farmers and PMI more resilient to price increments on diesel and diesel products, for instance. In 2020, based on our financial planning PMI allocated an annual budget accounting for approx. \$5M in investments in climate risk mitigation practices under the GAP program world wide. Similar yearly investment is expected over the next 10 years (long term). In 2020, the gradual switch to renewable sources and efficiency led to: - 67% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in PK, PH, IT, ES, MW, MZ, MX, BR and AR); - increased collaboration with PMI Leaf suppliers on climate change related risks and shared value creation. In 2020, we defined an internal carbon price of \$65/ton CO2eto identify where to act by comparing and ranking relevant GHG reduction projects globally based on their cost-effectiveness in reducing emissions and drive the expenditures needed prioritizing our list of initiatives. e.g., in 2020 we installed pyrolysis technology in our factory in Neuchâtel, which uses operational waste instead of fossil energies to produce steam and hot water. It will be operational in 2021. In addition, \$10M/year in our energy management program and \$200K/year to maintain our global energy metering system. Based on the investments made in previous years we evaluated an expected annual budget for capital expenditures of \$16-20M per year over a 6-7 years' timeframe. We have an extensive risk control program whereby locations with values exceeding \$30M are surveyed by engineers from our property insurer including physical risks. We have several locations that do have natural catastrophe exposures including flood risk, however this is addressed through risk improvement recommendations for physical mitigation solutions or implementation/reinforcement of management (administrative) controls such as protect openings, raise equipment, and implement Flood Emergency Response Plans. In 2019 we had, worldwide, less than a dozen natural catastrophe related recommendations that exceeded a \$10M loss expectancy. This information is reviewed regularly with top management. It enables risk/opportunity identification and management at the company and asset level. From our Climate-Change Risks Assessment, we have identified revenues, and access to capital as not yet impacted, and acquisitions & divestments and liabilities as not impacted at all.</p>

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

Our approach to decarbonizing our operations and value chain is guided by several corporate policies. Reducing our energy consumption and carbon emissions is embedded in our Environmental Commitment, our Guidebook for Success, our Responsible Sourcing Principles (RSP), and our Good Agricultural Practices (GAP) program; protecting forests, as a fundamental climate-regulation mechanism, is directed by our Zero Deforestation Manifesto.

It is integrated into normal business activities, forms part of our annual Long-Range Planning process which reviews and sets business direction, and performance appraisal process.

For PMI, sustainability means creating long-term value while minimizing the negative externalities associated with our products, operations and value chain. We have an important impact on our communities and environment that we are mindful of and committed to address.

In 2020 we continued to follow our sustainability materiality assessment outcomes to further embed sustainability across PMI's strategies. Climate protection, littering prevention and product eco-design and circularity, are tier 1 topics and are prioritized in our overall sustainability strategy.

We prepared our 2020 Integrated Report in accordance with the GRI Standards (Core option), aligned it with the principles and standards of the UN Global Compact and took into account those of the Sustainability Accounting Standards Board (SASB). We are part of the World Business Council for Sustainable Development (WBCSD), WeMeanBusiness coalition and with our participation to the UNFCCC COP21 in Paris and our support to the Paris Agreement, we have continued to engage and demonstrate our commitments to climate change adaptation and mitigation.

We aim to reduce our carbon emissions across our value chain. We have several programs in place to meet corporate targets and achieve our ambition.

Following the 2018 report by the Intergovernmental Panel on Climate Change (IPCC), it became clear that we must step up our ambition and reduce carbon emissions to align with the more prudent 1.5-degree pathway.

We also conducted a deeper analysis of our climate change risk assessment in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Based on these developments, we recently established new and more ambitious targets to guide our decarbonization journey:

- Achievement of carbon neutrality of PMI's direct operations (scope 1+2) by 2030 with the ambition to accelerate the target to 2025;
- Achievement of carbon neutrality of PMI's value chain (scope 1+2+3) by 2050;

- a reduction in absolute CO2 emissions consistent with science-based targets for a 1.5-degree scenario. During 2020 we have submitted our revised absolute reduction targets to the Science-Based Targets Initiative Committee and we obtained their validation.

Our climate change strategy has a key role in enabling our business efficiency which keeps us ahead of our competitors and believe that fulfilling our reduction targets puts us in a better strategic position vs our competitors when customers/investors assess our performance.

In the short term our strategy focuses on effective risk management, emissions reduction and renewable energy strategy development including:

- Direct materials supplier engagement program - Energy Management Program
- 4-year green energy procurement roadmap
- Central governance for on-site renewable investments
- Lifecycle Assessments (LCAs) in cigarette/packaging components and new products
- Annual GHG footprint
- Action plans for mitigating risks and seize opportunities

In the long-term our business strategy focuses on physical adaptation and long-term emissions reduction including:

- Approved science-based targets to reduce our value chain absolute carbon footprint
- Climate change risk and opportunities assessments (CCROA) to inform future management decisions (adaptation focus)
- The application of an internal shadow carbon price and a virtual internal carbon levy to best support PMI's investments in decarbonization projects
- Long-term sourcing strategies integrating CCROA considerations
- Customer and supplier sustainability strategies aligned with ours to ensure that our value chain progress supports our objectives

Our strategy and decisions are influenced by understanding and adapting to potential future climate change issues and by minimizing our environmental impact. We integrate climate related physical and transition risks and opportunities related to regulation, reputation and market by:

- Implementing carbon emission reduction projects with longer payback period
- Sourcing voluntary green electricity to decrease our dependence from fossil fuels and reduce our carbon footprint
- Embedding environmental sustainability considerations in our GAP and RSP since 2002 and 2017 respectively.

PMI supported the call for a price on carbon in the Paris Climate Agreement. Our targets, recognized by the Science-Based Targets initiative in 2020, demonstrate how PMI can contribute to keeping global warming below 1.5°C based on pre-industrial levels and remain financially competitive (IR2020 PDF link).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Both absolute and intensity targets

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2016

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2010

Covered emissions in base year (metric tons CO2e)

914050

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

40

Covered emissions in target year (metric tons CO2e) [auto-calculated]

548430

Covered emissions in reporting year (metric tons CO2e)

412999

% of target achieved [auto-calculated]

137.04146381489

Target status in reporting year

Achieved

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target covers scope 1 and 2 emissions from owned and operated buildings, factories and fleet. In 2016 we submitted this target and it was approved by the Science Based Target initiative (SBTi) in 2017. In 2020, we achieved 55% reduction versus our 2010 baseline exceeding by 15% the target set (i.e., 40% reduction by 2030) and thus resulting in 137% achieved ($55\%/40\% \times 100 = 137\%$). This achievement has been possible thanks to increased energy efficiency in our factories, on-site renewable investments, sourcing power from renewable resources and a program to reduce emissions in our vehicles fleet. Since the beginning of the pandemic, the priority has been to ensure the safety of our employees and their families. The company immediately activated the remote work policy and tools across our operations. With our people staying at home, energy consumption consequently dropped in the offices that stayed completely closed and increased in the facilities that stayed operational, with reduced capacity, due to the intensive operation of the ventilation systems; in total, our emissions from the offices dropped in 2020 by 31 percent versus 2019. In 2020, emissions from our fleet saw a great decline as well, of around 26 percent versus 2019, as an impact of the home office but also as a result of the lockdown measures implemented all over the globe and the lower number of kilometers driven by our employees, as well as our efficiency efforts. We consider the Covid-19 related reductions to be a temporary event, driven by an extraordinary emergency, the great majority of our carbon emission reductions has been achieved by dedicated projects in energy efficiency and switches to renewable energy between 2010-2020. This is what we consider to be a permanent result that we will continue to strive through implementation of our carbon reduction strategy.

Target reference number

Abs 2

Year target was set

2016

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2010

Covered emissions in base year (metric tons CO2e)

914050

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2040

Targeted reduction from base year (%)

60

Covered emissions in target year (metric tons CO2e) [auto-calculated]

365620

Covered emissions in reporting year (metric tons CO2e)

412999

% of target achieved [auto-calculated]

91.3609758765932

Target status in reporting year

Underway

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target covers scope 1 and 2 emissions from owned and operated buildings, factories and fleet. In 2016 we submitted this target and it was approved by the Science Based Target initiative (SBTI) in 2017. In 2020, we achieved a 55% reduction versus our 2010 baseline and thus 91% achieved ($55\%/60\%*100=91\%$). This achievement has been possible thanks to increased energy efficiency in our factories, on-site renewable investments, sourcing power from renewable resources and a program to reduce emissions in our vehicles fleet.

Target reference number

Abs 3

Year target was set

2016

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based) +3 (upstream & downstream)

Base year

2010

Covered emissions in base year (metric tons CO2e)

8062275

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

40

Covered emissions in target year (metric tons CO2e) [auto-calculated]

4837365

Covered emissions in reporting year (metric tons CO2e)

4002626

% of target achieved [auto-calculated]

125.884102191999

Target status in reporting year

Achieved

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target covers scope 1, 2 and 3 emissions from all operations and our entire value chain. In 2016 we submitted the target that was approved by the Science Based Target initiative in 2017 (SBTI). In 2020, we achieved a 50% reduction versus our 2010 baseline and thus 126% achieved ($50\%/40\%*100=126\%$). This achievement has been possible thanks to progress in reducing our environmental impact across our value chain: in our factories and fleet where our carbon footprint is relatively small compared to other industries, as well as beyond the factory gates. This achievement also includes looking at both our upstream supply chain activities (currently focusing on tobacco farming and direct materials) and downstream, following our product and packaging environmental impacts to end-of-use. In the overall reduction we are listing, the impact generated by the extraordinary conditions due to the Covid-19 pandemic that we consider temporary and not a part of our reduction strategy for which we are still investing according to the original and pre-pandemic plan.

Target reference number

Abs 4

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

555882

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

50

Covered emissions in target year (metric tons CO2e) [auto-calculated]

277941

Covered emissions in reporting year (metric tons CO2e)

412999

% of target achieved [auto-calculated]

51.4076728514325

Target status in reporting year

New

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

As per SBTi Submission guidance, the target boundary also includes biogenic emissions and removals (reported separately from the scopes), and which accounted in the base year for : Direct CO2 emissions from combustion of biofuels and/or biomass feedstocks : 1,057,115 tCO2 Estimated CO2 removals related to the use of biofuels and/or biomass feedstocks -932,885 tCO2

Target reference number

Abs 5

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 3 (upstream & downstream)

Base year

2019

Covered emissions in base year (metric tons CO2e)

4309443

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

50

Covered emissions in target year (metric tons CO2e) [auto-calculated]

2154721.5

Covered emissions in reporting year (metric tons CO2e)

3589627

% of target achieved [auto-calculated]

33.406451831478

Target status in reporting year

New

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

As per SBTi Submission guidance, the target boundary also includes biogenic emissions and removals (reported separately from the scopes), and which accounted in the base year for : Direct CO2 emissions from combustion of biofuels and/or biomass feedstocks: 1,057,115 tCO2 Estimated CO2 removals related to the use of biofuels and/or biomass feedstocks -932,885 tCO2

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2012

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based) + 3 (upstream and downstream)

Intensity metric

Other, please specify (kg CO2e per million cigarette equivalent sold)

Base year

2010

Intensity figure in base year (metric tons CO2e per unit of activity)

8706

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2020

Targeted reduction from base year (%)

30

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

6094.2

% change anticipated in absolute Scope 1+2 emissions

-55

% change anticipated in absolute Scope 3 emissions

-50

Intensity figure in reporting year (metric tons CO2e per unit of activity)

5482

% of target achieved [auto-calculated]

123.439773336396

Target status in reporting year

Achieved

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

<Not Applicable>

Please explain (including target coverage)

This target covers scope 1, 2 and 3 emissions from all operations and our full value chain per million of cigarette equivalent sold. From 2018 onwards we are reporting energy intensity based on sold units of equivalent cigarettes (versus produced units of cigarettes equivalent previously). In 2020 we achieved a 50% reduction versus our 2010 baseline (8,706 kg CO2 per million of equivalent cigarettes sold) and thus 123% achieved (50%/30%*100=123%). This achievement has been possible due to progress in reducing our environmental impact across our value chain: in our factories and fleet where our carbon footprint is relatively small compared to other industries, as well as beyond the factory gates. That includes looking at both our upstream supply chain activities (currently focusing on tobacco farming and direct materials) and downstream, following our product and packaging environmental impacts to end-of-use. % change anticipated in absolute scope 1+2 and scope 3 emissions are dependent on 2021 production volumes and ratio between conventional cigarettes vs smoke-free products, that is rapidly changing due to the growth of our smoke-free products. The % anticipated change in emissions in scopes 1, 2 and 3 have been calculated based on achieved reductions in 2020, which exceeds the original 2020 intensity target, and we expect to further improve this reduction by 2021.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2019

Target coverage

Business activity

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Percentage

Target denominator (intensity targets only)

<Not Applicable>

Base year

2010

Figure or percentage in base year

0

Target year

2025

Figure or percentage in target year

100

Figure or percentage in reporting year

78

% of target achieved [auto-calculated]

78

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is directly linked with our scope 1 and 2 SBT absolute reduction target (Abs1 & Abs2 & Abs 4).

Is this target part of an overarching initiative?

Science-based targets initiative

Please explain (including target coverage)

This target covers the amount of electricity purchased and self-generated from renewable sources. Our initial target, set in 2016, aimed at 100% renewable by 2030. This target was amended in 2019 for 100% by 2025 to reflect our increased ambition level. In 2020, 78% of our manufacturing facilities' electricity consumption was sourced from renewable sources versus our 2010 baseline where we were not sourcing/generating any. Thus 78% achieved ($78\%/100\%*100=78\%$). This achievement has been possible mainly due to European factories sourcing or generating green electricity. In 2020, a second factory in Indonesia, our factories in Kazakhstan and in Malaysia switched to renewable electricity. We will continue sourcing more renewable electricity as it becomes available in the countries where we operate. The 100% green electricity target covers all our factories and is part of PMI strategy to first and foremost drive toward a low-carbon economy by promoting the renewable energy industry as an alternative to fossil fuelled energy and subsequently reduce our scope 2 emissions. To achieve our ambitious Science Based Targets, PMI uses all the strategic tools and mechanisms that have been identified as good practices by the recognized international standards, including RE100 and EP100 guidelines to manage our company's energy consumption.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2015

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers	Other, please specify (Percentage of Virginia Flue Cured tobacco suppliers disclosing GHG emission related data)
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Target denominator (intensity targets only)

<Not Applicable>

Base year

2017

Figure or percentage in base year

0

Target year

2020

Figure or percentage in target year

100

Figure or percentage in reporting year

100

% of target achieved [auto-calculated]

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

Yes, Abs 3

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain (including target coverage)

As tobacco accounted for around 40% of PMI's carbon footprint in our 2010 baseline, PMI set goals and developed strategic initiatives to reduce GHG emissions related to tobacco growing including the emissions generated by the fuels used for the flue-cured Virginia (FCV) tobacco curing process. At the corporate level, PMI uses its GHG emission inventory to track emission reductions and flag potential deviations to ensure swift responses. At the supplier level, PMI uses the Monitoring Framework (MF) for Sustainable Leaf Curing Fuel, a mandatory requirement for all FCV suppliers (i.e., 100%), which requires them to report primary data (e.g., curing fuel type, fuel consumption, barn type, etc.), allowing PMI to calculate the GHG emissions from the overall tobacco curing process. This figure is used within PMI's year-on-year value chain GHG footprint calculations, contributing to the Abs3 target highlighted in C4.1a. The 3 strategic initiatives within the MF are: ▪ Reduce fuel consumption rate via curing efficiency improvement and curing barn optimization programs; ▪ Move from unsustainable to sustainable curing fuel sources; ▪ Encourage fuel switching to less polluting fuels and the use of biomass as an alternative to unsustainable wood fuels or fossil fuels where appropriate. The global roadmap for sustainable firewood aimed at supporting our tobacco suppliers to reach full implementation of the targets above by 2020 through engagement in capacity building activities with tobacco leaf suppliers and farmers. Our 2020 assurance process on curing fuel use in tobacco led by a third party verification reported 100% compliance with the Monitoring Framework. We look forward to maintaining the compliance while raising the requirements after 2020 in line with our renewed carbon neutrality ambitions.

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2030

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain (including target coverage)

In 2019 we set the target to achieve carbon neutrality of PMI's direct operations (scope 1+2) by 2030 and we expect to achieve the Scope 1&2 neutrality five years earlier than 2030 target. Business ambition is defined on the 1.5C scenario.

Target reference number

NZ2

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs2

Target year for achieving net zero

2050

Is this a science-based target?

Yes, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain (including target coverage)

In 2019 we set the target to achieve carbon neutrality of PMI's value chain (scope 1+2+3) by 2050. For the validation of this target we are awaiting to have the SBTi Net-zero guidelines issued to be able to follow the submission process and obtain SBTi approval. Early 2021 we have formally committed to Business ambition for 1.5 °C, signing the pledge (<https://sciencebasedtargets.org/companies-taking-action#table>) and joining the visionary corporate leaders taking ambitious climate action,

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	2585	
To be implemented*	500	57000
Implementation commenced*	107	9784
Implemented*	70	428259
Not to be implemented	99	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Transportation	Company fleet vehicle replacement
----------------	-----------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

1946

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

1387331

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

This initiative reflects the CO2e saved through the replacement of greener vehicle (both benefit vehicle and working tools) within PMI fleet. The monetary savings are calculated on the amount of fuel saved multiplied by an average worldwide price for fuel in 2020.

Initiative category & Initiative type

Energy efficiency in buildings	Building Energy Management Systems (BEMS)
--------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

267

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10400

Investment required (unit currency – as specified in C0.4)

26182

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

This concerns one initiative on the expansion of the BMS of our factory in Philippines to cover its wastewater treatment plant to reduce energy consumption and optimize efficiency.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)
--------------------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

18607

Scope(s)

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

1624738

Investment required (unit currency – as specified in C0.4)

1902943

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

40 initiatives in HVAC systems optimization and modernizations in existing units in our manufacturing centers.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

185

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

17055

Investment required (unit currency – as specified in C0.4)

46900

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

These are initiatives mainly focused on installation of LED lighting in our factories. In total 2 initiatives in 2020.

Initiative category & Initiative type

Energy efficiency in production processes	Compressed air
---	----------------

Estimated annual CO2e savings (metric tonnes CO2e)

1229

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

242442

Investment required (unit currency – as specified in C0.4)

532332

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

11 initiatives implemented in our factories compressed air systems, mainly focusing on the decrease of pressure, equipment modernization, leakages prevention, to name some.

Initiative category & Initiative type

Energy efficiency in production processes	Cooling technology
---	--------------------

Estimated annual CO2e savings (metric tonnes CO2e)

502

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

72457

Investment required (unit currency – as specified in C0.4)

171295

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Five initiatives in central cooling systems implemented in our factories in 2020.

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (Steam system)
---	---------------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

324

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

50318

Investment required (unit currency – as specified in C0.4)

10011

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

In 2020 we implemented 3 initiatives in our factories in Argentina, Serbia and Russia to upgrade our steam system equipment by changing the air intake points and reduce steam pressure.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

67

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

53386

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

In 2020 we improved the efficiency of the air treatment in our smoke free products production process in Russia, reducing its energy consumption.

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery
---	---------------------

Estimated annual CO2e savings (metric tonnes CO2e)

246

Scope(s)

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

37324

Investment required (unit currency – as specified in C0.4)

111994

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

In 2020 we implemented 2 initiatives in our manufacturing centers in Turkey and Switzerland to recover heat from our steam system.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix
-------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

35209

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

66250

Payback period

No payback

Estimated lifetime of the initiative

1-2 years

Comment

Renewable energy (certified green electricity) procurement for most of our EU facilities, Serbia, Mexico, Colombia and Turkey which commenced in 2014 and in 2020 expanded to new countries like factories in Indonesia, Kazakhstan and Malaysia . All certificates are available for 2020. Investment is the current additional amount paid for green electricity.

Initiative category & Initiative type

Company policy or behavioral change	Resource efficiency
-------------------------------------	---------------------

Estimated annual CO2e savings (metric tonnes CO2e)

28270

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

42400000

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Productivity program co-lead by Procurement and Product Development teams focusing on Direct Materials (DIMs) to identify and implement opportunities for: specification harmonization, specification optimization thru down gauging, material usage optimization and reduction, material substitution, waste optimization/reduction and reuse, and material removal. No investment is required since the further deployed specifications are already existing and running on our production lines and do not require capex. The Program was initiated beginning of 2019, with first deployment on our production lines of certain projects in 2019 following quality and machinability tests. Some other initiatives, requiring more extensive testing procedures and/or production capacity planning on supplier's side, were commenced in 2020. Scope 3: category 1 purchased goods

Initiative category & Initiative type

Company policy or behavioral change	Other, please specify (Increase Supply Chain network visibility to improve demand forecasts and optimize production planning, reducing requirements of DIM)
-------------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

7263

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

15250000

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Our Direct Materials expenditure has a strong link with our ability to forecast our production requirements to serve the demand. Also, the carbon footprint linked to DIM usage is determined by the quantity of such materials that we are required to purchase each year to feed our production lines. While demand suffers short term notice major fluctuations, the industrial processes behind the supply chains of DIM has not the required flexibility to adjust accordingly. Indeed, lot sizes are applied to purchase orders with minimum order quantities requirements from suppliers. This creates left overs of DIM ordered, delivered and unused. These materials have many specificities [designs, languages, sizes, machine park specificities] that generates low interchangeability and/or re-usability levels in case of leftovers from production. This program

aims at increasing our demand planning capability, by installing new processes and tools, reducing the amount of leftovers from production by better adjusting our requirements' call offs to our production needs.

Initiative category & Initiative type

Company policy or behavioral change	Resource efficiency
-------------------------------------	---------------------

Estimated annual CO2e savings (metric tonnes CO2e)

334144

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

5000000

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

In our tobacco supply chain, we achieved an absolute reduction in 2020 of 334,144 tons of CO2e vs 2019 from improvements in tobacco curing process and fertilizer use, which are the main GHG emission contributors within tobacco scope 3 sub-categories. While most farmers own their curing barns, PMI and our suppliers provide guidance and support to make them more fuel-efficient (e.g., combustion efficiency, ventilation, and heating control, insulation), monitoring the results in GHG reduction. The improvement projects carried out in 2020 increased the efficiency of 2,146 barns in all markets where we source from, for a cumulative total of 82,519 barns upgraded since 2014. In 2020, we delivered improvement projects around the world, including training farmers on fuel efficiency. We are seeing farmer profitability improve as a result of cost savings on farms. While we encourage minimizing the use of fertilizers in our supply chain in line with our Good Agricultural Practices (GAP) program, technological developments in the manufacturing process for fertilizers have also contributed to reducing their GHG footprint. In 2019, PMI updated its calculation model for fertilizers' GHG emissions to more precisely assess their impact on the company's carbon footprint in addition to further decrease in fertilizer use. The internal investment of 5M reflects the annual budget allocated in 2020 to environmental projects under the GAP across all regions. Scope 3: category 1 purchased goods.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Our Energy Management Program (over \$100 million in investments from 2010-2020) aims to reduce our factories' energy consumption and help achieve greenhouse gas emissions reduction targets. In 2020 we achieved a reduction of 26% of our scope 1 and 2 compared to our 2019 baseline and progressing towards our target to reduce 50% by 2030. Our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program. To support our Drive 4 Zero program, an Energy Saving Initiatives (ESIs) program has been started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects.
Marginal abatement cost curve	We consider a longer rate of return (4 years or more) for certain energy savings and renewable energy projects. A Marginal Abatement Cost Curve (MACC) methodology has been developed and applied to evaluate carbon emission reduction related projects.
Dedicated budget for other emissions reduction activities	We have developed a renewable energy strategy with an initial focus on low-carbon electricity uptake in the EU. We commenced the program in 2012 and continued to implement it in more facilities in 2020. We continue to seek new opportunities to purchase greener energy. In order to drive the adoption of low-carbon electricity sources within our entire organization, we set the more stringent target to have 100% of our affiliates switched to green electricity by 2025. We are well progressing as we have already reached 78% in 2019.
Compliance with regulatory requirements/standards	Compliance with policies and regulations are core to the way PMI operates. In some circumstances compliance with regulatory requirements and standards it also provides PMI with the opportunity to achieve energy/emissions reductions and particularly when investing in new processes (e.g., requirements for renewable energy or energy efficiency) for new or upgraded facilities in Greece and Italy, under EU ETS scheme. This has allowed us to delist sites in Germany and Portugal from the EU ETS scheme in previous years.
Employee engagement	Employee engagement is implemented through our objective setting, Long-Range Planning process and via employee communications, sharing of tools, guidance and best practices. In 2020, the communication team in PMI Operations supported the engagement of all operations employees (more than 20,000 people are working in PMI's operations worldwide) who received senior management briefings on sustainability topics including Climate Change, carbon footprint, renewable energies, etc. Local market EHS managers and Sustainability coordinators run specific focus days and campaigns in all markets where we operate.
Other (Dedicated budget to incentivize other emissions reduction initiative in our agricultural supply chain)	GAP is a broad program with 4 sustainability-related pillars – governance, people, crop and environment – implemented by our leaf suppliers and contracted farmers. It promotes an Integrated Production System which supports farmers in improving yield and farm efficiency on a variety of crops (particularly food crops) and not only tobacco. Through GAP, environmental improvement programs are implemented in all the countries where we source tobacco around the world; these programs include among others: curing barn efficiency improvements; curing fuel switching to low GHG emitting fuels; eliminating the use of coal; increasing the use of biomass; and helping farmers become wood self-sufficient and seeking traceable sources of sustainable wood.
Internal price on carbon	In line with our ambition to reduce carbon emissions aligning with the 1.5-degree target in 2020 we have introduced a shadow carbon price to help ensure that business decisions reflect environmental costs by putting a price on carbon emissions. We have modelled what an adequate internal shadow carbon price should be for PMI following a robust methodology, best international practices, and a worst-case scenario analysis of transition risks projected by 2030 and specific to our emission profile and the geographies where we operate. We have concluded that an adequate shadow carbon price for PMI is US\$ 65 per ton of CO2e emitted. This will be used in all business cases preparation when they entail an impact (favorable or unfavorable) on our carbon emissions.
Internal finance mechanisms	Carbon reduction and compensation projects are stimulated and promoted at PMI through the adoption of an internal financial mechanism that uses an internal virtual carbon levy to support adoption of new technology and invest in impactful projects in GHG reduction/avoidance/removal. PMI carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of using calculated virtual revenue to size and fund investments that contribute to the decarbonization of the business and support behavioral change. The levy is collected in a climate fund (the PMI Portfolio of Climate Investments) to finance high quality carbon credits and removal projects aligning with the demanding additional attributes PMI has set for them.
Dedicated budget for low-carbon product R&D	Our 2025 eco-design and circularity ambitions are to provide access to collection and recovery for the device and its consumables to all IQOS users and continue to reduce the carbon footprint of our smoke-free products in line with our science-based targets. The way we work is guided by the foundation principles of eco-design and circularity, which account for impacts related to materials sourcing, product function and design, manufacturing, use, and end-of-life. In our operations, eco-design principles inform how we use life-cycle analysis (LCA) to assess the comparative carbon footprint of our products, from tobacco sourcing to end-of-life impacts. Our long-term vision remains to recycle any waste that we collect while minimizing our CO2 footprint. In 2020, we advanced our discussion with several waste management and recycling partners on potential second life that we could give to our recycled HTUs. Our exploration is primarily focused on the recycling of the cellulose acetate, one of the materials our filters are made from. Our investigations to date show chemical properties of cellulose acetate enable the material to be upcycled into a variety of applications: spinning of the fibers into fabrics, creation of pellets that can then be pressed/injection moulded into a variety of hard goods. Though these results are promising, the recycling of cellulose acetate – unlike recycling for many metals or plastics – is not a widely available and developed waste stream across the globe that we can leverage. When IQOS users return broken or end-of service devices, our reverse-logistics program CIRCLE helps to cycle materials back into the economy. In 2020, we continued the rollout of our CIRCLE program, achieving 48 percent market volume coverage (up from 39 percent in 2019, target is 100% in 2025), by adding two new markets to the program. In addition to developing services to reduce the end-of-life impact of our products, our innovation and design teams are also exploring low carbon, recyclable, and biodegradable options for filters and cartridges. We are committed to significant investment into continued research on the biodegradability of filters, and we are working toward a viable solution that meets strict international standards, satisfies market requirements, and works with high volume manufacturing.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

397210

Comment

In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change.

Scope 2 (location-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

447322

Comment

In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change. Scope 2 (market-based)

Scope 2 (market-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

158672

Comment

In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

IEA CO2 Emissions from Fuel Combustion

ISO 14064-1

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify (Ecoinvent to estimate the CO2 embedded in products in certain products within our value chain; Defra Voluntary 2020 Reporting Guidelines)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

We aim at using the most relevant and/or updated conversion factor for each activity data and calculated emissions.

We ensure we remain as up to date with newly released coefficient by DEFRA when they release updated conversion factors. We started using IEA because the conversion factors for electricity at country level are not provided by DEFRA or GHG Protocol anymore.

In some case, primary data are not possible to use, this is even more true within our value chain (scope 3) calculations. For example, for purchase goods considering the high volume of goods purchased, we rely on Ecoinvent to apply the most accurate methodology

GHG protocol is used de facto for countries where there are no national conversion factors guidance (Latin America or Asia).

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

322633

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Our scope 1 emissions correspond to manufacturing, offices, warehouses and sales fleet.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Our scope 2 emissions correspond to manufacturing, offices and warehouses emissions.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

383895

Scope 2, market-based (if applicable)

90366

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Our scope 2 emissions correspond to manufacturing, offices and warehouses emissions.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Emissions from PMI operated IQOS stores

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

As our IQOS stores activities are growing, we performed an analysis in order to estimate their emissions. These activities are performed by PMI entities (no Franchises). We based our calculation on the 2020 IQOS stores footprint (m2) and BEIS ND-NEED and DEFRA emissions factors. Our calculations indicated that these emissions are standing for 0.7% of our 2020 Scope 1 and 2 emissions (<5% materiality level). Based on this, PMI understands that these business activities will remain in its watch list, though excluded from our inventory for the time being.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2636097

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

63

Please explain

Includes emissions that are product-related (i.e., the materials purchased to make each product) and those emissions non-product-related (i.e. everything else, office stationery, advertising etc.). Closed to half of this category has been calculated using data received from our suppliers. The rest has been calculated based on material weights sourced or spending and specific emissions factors for each of the materials from international databases like BEIS (DEFRA) and Ecoinvent.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

79990

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Capital goods include emissions from goods that are used to manufacture/distribute PMI's products, or other office buildings and includes for example machinery, buildings or facilities.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

87113

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category includes the emissions related to the production of fuels and electricity consumed by PMI. i.e. for all fuel-related emissions calculated as its scope 1&2 emissions, such as associated emissions to extract gas, coal and oil, transport and process prior to combustion, and losses in supplying electricity. All these emissions are accounted for in this category.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

521617

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

24

Please explain

This category includes emissions from all purchased (non-owned) transport and distribution services. This includes inbound logistics, outbound logistics (i.e., sold products, if PMI has paid for/purchased the service) by land, sea and air freight, transport between PMI facilities and energy consumed in third party warehouses.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4808

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard methodology from WRI. Our waste flows were broken up into over 50 different waste types and treatment methods. The Technical Guidance for Calculating Scope 3 emissions (GHG Protocol) publish emissions factors for the treatment of each type of waste. We calculated the GHG emissions of each type of waste flow by multiplying the tonnage of each waste flow by its associated emissions factor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category includes emissions from the third-party disposal and treatment of waste generated by PMI's owned or controlled operations.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

17265

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

76

Please explain

This category includes estimates of emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties. This includes emissions generated by employees travelling by air, road, rail and boat. It also includes the emissions due to stays in hotels.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

38437

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category includes emissions arising from the transportation of employees between their homes and their worksites. Typically, this may include emissions from: automobile travel, bus travel, rail travel, air travel and other modes including subway, cycling and walking.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category includes emissions from the operation of assets that are owned by other entities and leased to the reporting company (acting as a lessee), and are not already included in scope 1 and 2. PMI does lease some warehouse space from third parties with emissions that are not accounted for in scope 1 and 2. However, this warehouse space is included within category 4 – upstream transportation and distribution. The GHG Protocol refers to transportation and distribution, and for PMI the warehouses are part of the distribution network, leading to its reporting combined with transportation. Therefore category 8 has been excluded to avoid double counting.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

50935

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category covers the transport of sold finished goods (FG) to the retailers and end-consumers. Transport relating to the end-consumer travelling to the retailer is generally not included under value chain or product footprinting standards. PMI fleet transportation is included in Scope 1&2 emissions, therefore, only non-PMI fleet transport is included in this category. Any transport / storage of sold products paid for by PMI is included in category 4, and excluded from this category. Therefore, all transport distances input for Category 9 calculations should exclude PMI-owned and operated transport (Scope 1 & 2) and any Third Party (TP) services procured by PMI (Category 4). Some transport legs will have a mixture of two or three of these types of transport services, but Category 9 emissions relate to transport of sold goods paid for by independent external parties only.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category includes customer's emissions relating to the processing of intermediate products sold by a reporting company, such as the conversion of aluminum ingots into aluminum injection molded products. This category was reviewed in 2018 and it has been concluded that PMI sold only final products to end-users, and no intermediate products which could be further processed, transformed or included into other products, therefore this category has been excluded.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

100263

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

16

Please explain

This category refers to emissions from the use of goods and services sold by PMI to end users, i.e. consumers that use these final products. Emissions from the P1 RRP product are predominantly caused by the electrical charging of the product. This category also includes emissions arising from the use of lighters with conventional cigarettes, cigars and other tobacco products (OTP).

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

53103

Emissions calculation methodology

Our Value Chain Model and Footprint is calculated to align with the accepted international standard for GHG value chain modelling "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" methodology from WRI.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category refers to emissions from the waste disposal and treatment of products sold by PMI at the end of their life (EoL).

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

PMI does lease some office floor-space in certain offices around the world, but this has been confirmed as extremely small, and regarded as de minimis, therefore this category has been excluded.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Whilst PMI pays other entities to manufacture finished goods (accounted for in category 1a) from materials purchased by PMI (also accounted for in category 1a), as ownership of finished goods always returns back to PMI, there are no examples of franchise operations to account for, therefore this category has been excluded.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Emissions associated with investments were estimated based on each of the investee organisations (full value chain), allocating the emissions to PMI based on ownership share, and eliminating any double-counting if the emissions are already reported elsewhere. These emissions are currently excluded from the value chain inventory since their contribution to the PMI's Scope 3 emissions is below the materiality threshold.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

There are currently no other (upstream) emissions at this time.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

There are currently no other (downstream) emissions at this time.

C-AC6.6/C-FB6.6/C-PF6.6

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?

Yes

C-AC6.6a/C-FB6.6a/C-PF6.6a

(C-AC6.6a/C-FB6.6a/C-PF6.6a) Disclose your Scope 3 emissions for each of your relevant business activity areas.

Activity

Agriculture/Forestry

Scope 3 category

Purchased goods and services

Emissions (metric tons CO2e)

761226

Please explain

These emissions include those corresponding to agricultural practices and inputs such as seedling, fertilizers, curing fuels and crop protection agents. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint have been modelled using the Life Cycle Assessment (LCA) tool, Simapro. For our carbon footprint emissions, we undertook a 3rd party full scope 3 verification against ISO 14040 standards and the GHG Protocol Scope 3 Accounting and Reporting Standard. Due to the new baseline calculations, we have been able to use real data and in cases where no primary data was available extrapolated emissions from international databases such as Ecoinvent have been used.

Activity

Distribution

Scope 3 category

Upstream transportation and distribution

Emissions (metric tons CO2e)

521617

Please explain

These emissions include those corresponding to upstream distribution due to ocean, air and overland transportation plus the warehouse emissions in distribution. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint have been modelled using the Life Cycle Assessment (LCA) tool, Simapro. For our carbon footprint emissions, we undertook a 3rd party full scope 3 verification against ISO 14040 standards and the GHG Protocol Scope 3 Accounting and Reporting Standard. Due to the new baseline calculations, we have been able to use real data and in cases where no primary data was available extrapolated emissions from international databases such as Ecoinvent have been used.

Activity

Distribution

Scope 3 category

Downstream transportation and distribution

Emissions (metric tons CO2e)

50935

Please explain

These emissions include those corresponding to downstream distribution due to in market local distribution. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including several estimates and assumptions, using impact databases. Elements of our carbon footprint have been modelled using the Life Cycle Assessment (LCA) tool, Simapro. For our carbon footprint emissions, we undertook a 3rd party full scope 3 verification against ISO 14040 standards and the GHG Protocol Scope 3 Accounting and Reporting Standard. Due to the new baseline calculations, we have been able to use real data and in cases where no primary data was available extrapolated emissions from international databases such as Ecoinvent have been used.

Activity

Consumption

Scope 3 category

Use of sold products

Emissions (metric tons CO2e)

100263

Please explain

This activity considers the use of cigarette lighters. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including several estimates and assumptions, using impact databases. Elements of our carbon footprint have been modelled using the Life Cycle Assessment (LCA) tool, Simapro. For our carbon footprint emissions, we undertook a 3rd party full scope 3 verification against ISO 14040 standards and the GHG Protocol Scope 3 Accounting and Reporting Standard. Due to the new baseline calculations, we have been able to use real data and in cases where no primary data was available extrapolated emissions from international databases such as Ecoinvent have been used.

Activity

Consumption

Scope 3 category

End of life treatment of sold products

Emissions (metric tons CO2e)

53103

Please explain

Downstream waste treatment and street cleaning related to cigarette butts and waste packaging. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including several estimates and assumptions, using impact databases. Elements of our carbon footprint have been modelled using the Life Cycle Assessment (LCA) tool, Simapro. For our carbon footprint emissions, we undertook a 3rd party full scope 3 verification against ISO 14040 standards and the GHG Protocol Scope 3 Accounting and Reporting Standard. Due to the new baseline calculations, we have been able to use real data and in cases where no primary data was available extrapolated emissions from international databases such as Ecoinvent have been used.

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Yes

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)

7285.2

Methodology

Default emissions factors

Please explain

These are biogenic emission for the consumption of biomass in our factories. The emission factor used come from DEFRA2020 database.

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)

1187.01

Methodology

Default emissions factors

Please explain

These are biogenic emission for the consumption of biodiesel and bioethanol in our fleet. The emission factor used come from DEFRA2020 database.

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities

Tobacco

Do you collect or calculate GHG emissions for this commodity?

Yes

Please explain

These emissions include those corresponding to agricultural practices and inputs such as seeding, fertilizing, curing fuels and crop protection agents and the logistics required to source tobacco from farms to our buying stations and from there to the stemmeries.

Agricultural commodities

Timber

Do you collect or calculate GHG emissions for this commodity?

Yes

Please explain

We collect and calculate emissions from curing fuels used for tobacco and other direct materials used in our manufacturing process like packaging, cigarette papers, acetate tow for filters, etc.

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Timber

Reporting emissions by

Total

Emissions (metric tons CO₂e)

797517

Denominator: unit of production

<Not Applicable>

Change from last reporting year

Lower

Please explain

In 2020, we accounted for 797,517 tCO₂e of emissions coming from the timber that is part of our supply chain, in detail 78% of the emissions came from our timber-based materials supply chain and the remainder from the timber based curing fuels for our tobacco leaf supply chain. Our total emissions in the previous year were 1,247,823 tCO₂e resulting in 36% decrease overall. We achieved this by engaging with other direct materials suppliers using timber as raw material and inviting them to participate in our CDP supply chain; we collect primary data (e.g., emissions allocated) and collaborate with them to reduce carbon footprint. In the tobacco leaf supply chain we could reduce the curing emissions related to timber materials by more than 50% proving that the firewood used by our farmers is sustainable and therefore does not cause land use change of forest degradation consequently lowering significantly the emissions for the whole process.

Tobacco

Reporting emissions by

Total

Emissions (metric tons CO₂e)

911160

Denominator: unit of production

<Not Applicable>

Change from last reporting year

Lower

Please explain

In 2020, we reduced our emissions by 334,144 tCO₂e in our tobacco supply chain. Our total emissions in the previous year were 1,245,304 tCO₂e, resulting in a 27% decrease. Total emissions for tobacco include all activities performed and inputs used by farmers and related to tobacco seedling production, fertilizers, pesticides, transport, mechanization and curing. Our Good Agricultural Practices (GAP) program promotes environmentally sustainable practices, including the elimination of highly hazardous pesticides, the promotion of bio-pesticides and the overall reduction of pesticide use, biodiversity management and reforestation, as well as water, soil, and waste management. A significant percentage of the total GHG emissions attributed to our tobacco purchases result from the curing process of Virginia flue-cured tobacco and emissions are related greatly to the unsustainable use of firewood for curing causing deforestation and being linked to land use change. With our Renewable Curing Fuel program we have focused on minimizing the risk by supporting a sustainable firewood sourcing system validated by the application of an internal protocol (our Monitoring Framework) that is audited on a yearly basis by a third party. For 2020 all our Virginia flue cured tobacco suppliers were audited and assessed as fully compliant and the relative emissions that we calculated via our proprietary reporting system resulted in a further decrease from the previous years. Compared to our 2010 baseline in 2020 we have reached a 77% reduction in the emissions generated by tobacco curing and 67% of our global flue cured tobacco purchase was cured with timber-based biomass. The efforts on the ground with our suppliers and the strong assurance process we carry out on a yearly basis allowed to validate that 100% of our flue cured tobacco in 2020 was purchased at no risk of deforestation of primary forests bringing the risk for land use change related to tobacco curing to the minimum.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00001439

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

412999

Metric denominator

unit total revenue

Metric denominator: Unit total

28694000000

Scope 2 figure used

Market-based

% change from previous year

22.83

Direction of change

Decreased

Reason for change

The reasons for change are: i) the decrease in absolute CO₂e emissions by 25.70% from 555,882 tons in 2019 to 412,999 tons in 2020, driven by 66 carbon reduction activities in our manufacturing facilities such as on-site renewable projects, energy efficiency projects, like for example the 40 projects in HVAC systems optimization that can yield more than 18.000 tonnes of CO₂ reduction per year and increased green electricity sourcing and a 3.7% decrease in net revenues (from \$29.8 billion in 2019 to \$28.7 billion in 2020). COVID 19 pandemic and volumes decline impact have been important drivers for 2020 CO₂ reduction performances; and therefore 2020 landing figures can not be taken as benchmark for future target (i.e., similar levels of reduction are not replicable in 2021). Since the beginning of the pandemic, the priority has been to ensure the safety of our employees and their families. The company immediately activated the remote work policy and tools across our operations. Energy

consumption consequently dropped in the offices that stayed completely closed and increased in the facilities that stayed operational, with reduced capacity, due to the intensive operation of the ventilation systems; in total, our emissions from the offices dropped by 31 percent versus 2019. Emissions from our fleet saw a great decline as well, of around 26 percent versus 2019, either as an impact of the home office but also as a result of the lockdown measures implemented all over the globe and the lower number of kilometers driven by our employees, as well as our efficiency efforts. The intensity number is derived from our 2020 CO₂e emissions of 412,999 tons divided by net revenues of \$28.7 billion. The term "net revenues" refers to operating revenues from the sale of our products, excluding excise taxes, and net of sales and promotion incentives. We believe that the most appropriate basis of disclosure is net revenue (as defined) and in line with CDP guidance.

Intensity figure

5.83

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

412999

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

70849

Scope 2 figure used

Market-based

% change from previous year

22.92

Direction of change

Decreased

Reason for change

The main reason for change is the decrease in absolute CO₂e emissions by 25.70% from 555,882 tons in 2019 to 412,999 tons in 2020, mainly driven by carbon reduction activities in our manufacturing facilities (such as on-site renewable projects, energy efficiency projects and increased green electricity sourcing) and a 4% decrease of total number of employees to 70,849 which have a minimal impact in the calculation. COVID 19 pandemic have been an important driver for 2020 CO₂ reduction performances; and therefore 2020 landing figures can not be taken as benchmark for future target (i.e., similar levels of reduction are not replicable in 2021). Since the beginning of the pandemic, the priority has been to ensure the safety of our employees and their families. The company immediately activated the remote work policy and tools across our operations. Energy consumption consequently dropped in the offices that stayed completely closed and increased in the facilities that stayed operational, with reduced capacity, due to the intensive operation of the ventilation systems; in total, our emissions from the offices dropped by 31 percent versus 2019. Emissions from our fleet saw a great decline as well, of around 26 percent versus 2019, as an impact of the home office but also as a result of the lockdown measures implemented all over the globe and the lower number of kilometers driven by our employees, as well as our efficiency efforts. The intensity number is worked out from our 2020 CO₂e emissions of 412,999 tons divided by 70,849 FTE employees. In 2019 we had 555,882 tons of CO₂e emissions and 73500 FTE employees

Intensity figure

418.24

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

305381

Metric denominator

Other, please specify (Combustible and smoke free-products shipment volume (in billion units))

Metric denominator: Unit total

730.16

Scope 2 figure used

Market-based

% change from previous year

16

Direction of change

Decreased

Reason for change

This covers Scope 1 and 2 emissions from our manufacturing facilities only. We decreased our CO₂ intensity from 498kg CO₂ per million cigarettes equivalent sold in 2019 to 418 kg CO₂ per million cigarettes equivalent sold in 2020. This was driven by our Energy Management Program activities, and renewable energy projects and slightly declining production volumes. Moreover, our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program. To support our Drive 4 Zero program, an Energy Saving Initiatives (ESIs) program started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects. The intensity number is worked out from our 2020 305,381 tCO₂e emissions (for manufacturing) divided by 730 billion cigarettes equivalent sold volume. In 2019 we had 394,447 tons of CO₂e emissions and 792 billion cigarettes equivalent sold. The reduction of 16% is due to the Energy Saving Initiatives listed in section 4.3b, the increase in the purchased renewable electricity and the impact of COVID 19 pandemic that has been an important driver for 2020 CO₂ reduction performances; and therefore 2020 landing figures can not be taken as benchmark for future target (i.e., similar levels of reduction are not replicable in 2021).

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	321464	IPCC Fifth Assessment Report (AR5 – 100 year)
CH ₄	395	IPCC Fifth Assessment Report (AR5 – 100 year)
N ₂ O	774	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO ₂ e)
Albania	73.86
Algeria	252.51
Argentina	7537.74
Armenia	117.49
Australia	533.99
Bangladesh	9.08
Bosnia & Herzegovina	87.62
Brazil	7718.85
Bulgaria	207.03
Canada	2543.8
Chile	32.58
China	49.58
China, Hong Kong Special Administrative Region	47.27
China, Macao Special Administrative Region	0.16
Colombia	368.33
Costa Rica	558.8
Croatia	281.15
Czechia	4239.41
Denmark	162.79
Dominican Republic	834.08
Ecuador	686.86
Egypt	851.6
El Salvador	98.92
Finland	44.53
France	1008.66
Georgia	141.82
Germany	15697.13
Greece	7732.99
Guatemala	128.4
Hungary	831.19
India	52.21
Indonesia	40977.89
Italy	25907.04
Jamaica	64.13
Japan	3461.46
Jordan	443.79
Kazakhstan	3908.8
Kuwait	40.41
Lebanon	66.7
Malaysia	10231.06
Mexico	4961.45
Morocco	207.4
Netherlands	31389.62
Lithuania	1796.24
New Zealand	199.23
Nicaragua	85.21
Norway	19.87
Pakistan	4263.3
Panama	22.28
Paraguay	18.11
Peru	41.54
Philippines	21962.18

Country/Region	Scope 1 emissions (metric tons CO2e)
Poland	14192.67
Republic of Korea	8212.66
Republic of Moldova	84.44
Réunion	85.91
Romania	12794.02
Russian Federation	30601.41
Senegal	667.25
Serbia	5084.89
Singapore	431
Slovakia	376.06
Slovenia	77.56
South Africa	1037
Spain	906.25
Sweden	240.93
Switzerland	4472.33
Taiwan, Greater China	305.07
North Macedonia	81.03
Thailand	1067.26
Tunisia	137.59
Turkey	21850.79
Ukraine	8235.41
United Arab Emirates	420.19
United Kingdom of Great Britain and Northern Ireland	297.21
Uruguay	17.83
Venezuela (Bolivarian Republic of)	8.11
Viet Nam	303.21
Other, please specify (Rest of the world (where we do business))	981.7
Israel	843.11
Portugal	5819.73
Nigeria	2.69

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Manufacturing	240092.25
Offices and Warehouses	3083.73
Vehicle Fleet	78475.8
Private Aircraft	981.69

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity

Processing/Manufacturing

Emissions category

<Not Applicable>

Emissions (metric tons CO2e)

240092.25

Methodology

Default emissions factor

Please explain

This category regroups all activities related to manufacturing The emission factor used come from DEFRA2020 database.

Activity

Distribution

Emissions category

<Not Applicable>

Emissions (metric tons CO2e)

82541.22

Methodology

Default emissions factor

Please explain

This category regroups all activities related to distribution (including offices, warehouses and aircraft) The emission factor used come from DEFRA2020 database.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Albania	22.881	22.881	57.99	0
Algeria	20.449	20.449	40.53	0
Argentina	9319.51	3356.45	28942.57	18518.8
Armenia	8.69	8.69	45.61	0
Aruba	20.72	20.72	32.05	0
Australia	279.41	279.41	392.44	0
Austria	3.02	3.02	48.53	0
Lithuania	2210.39	354.56	29069.31	26935.2
Bangladesh	10.43	10.43	21.13	0
Netherlands	16014.5	67.19	38330.53	38169.72
Bosnia & Herzegovina	63.63	63.63	139.99	0
Brazil	1676.71	1676.71	16800.69	0
Bulgaria	74.3	74.3	165.88	0
Canada	1984.94	417.68	15048.84	11882.19
Chile	12.17	12.17	30.3	0
China	44.85	44.85	72.73	0
Colombia	107.45	107.45	669.46	0
Costa Rica	3.26	3.26	350.69	0
Croatia	29.62	0	203.57	144.28
Curaçao	21.71	21.71	38.18	0
Czechia	12505.2	77.29	25232.45	25076.49
Denmark	1.93	1.93	18.97	0
Dominican Republic	397.71	397.71	708.04	0
Ecuador	332.34	332.34	1675.08	0
Egypt	45.29	45.29	93.26	0
El Salvador	26.08	26.08	152.4	0
Finland	2.44	2.44	20.69	0
France	7.87	7.87	142.77	0
Georgia	6.57	6.57	78.98	0
Germany	10748.37	418.64	28955.26	25734.26
Greece	13825.75	0	25353.11	25353.11
Guatemala	38.18	38.18	100.05	0
China, Hong Kong Special Administrative Region	404.64	404.64	548.07	0
Hungary	76.5	76.5	301.32	0
India	97.27	97.27	129.36	0
Indonesia	70533.49	8660.21	93468.69	81938.6

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Israel	361.84	361.84	731.14	0
Italy	18702.97	340.62	67150.88	66044.98
Jamaica	16.29	16.29	28.09	0
Japan	397.07	397.07	790.67	0
Jordan	2064.22	2064.22	4680.78	0
Kazakhstan	6693.28	805.67	11154.17	9215.24
Republic of Korea	14286.98	14286.98	26709.62	0
Kuwait	16.84	16.84	26.92	0
Lebanon	44.22	44.22	61	0
China, Macao Special Administrative Region	2.1	2.1	4.66	0
Malaysia	5016.41	176.98	10873.2	10605.81
Mexico	11651.83	423.84	25535.45	24606.59
Republic of Moldova	17.49	17.49	35.94	0
Morocco	35.33	35.33	55.62	0
New Zealand	7.78	0	71.71	71.71
Nicaragua	17.11	17.11	57.41	0
Nigeria	12.98	12.98	31.28	0
Norway	0.23	0.23	26.22	0
Pakistan	2621.97	2621.97	7308.37	635
Panama	3.02	3.02	17.33	0
Paraguay	2.06	2.06	2.29	0
Peru	7.55	7.55	37.81	0
Philippines	38589.83	2314.95	54932.14	51007.32
Poland	50026.9	3615.11	78274.14	65396.36
Portugal	7179.47	0	24181.42	24181.42
Romania	11002.28	63.5	32852.42	32662.8
Senegal	3438.74	3438.74	3993.89	0
Serbia	14733.15	77.03	20116.47	19999.45
Singapore	1369.87	1369.87	3520.6	0
Slovakia	15.03	15.03	94.32	0
Slovenia	59.15	59.15	305.49	0
South Africa	2304.22	2304.22	2572.25	0
Spain	75.1	75.1	289.39	0
Sweden	21.97	21.23	179.59	56.59
Switzerland	943.41	24.08	35559.45	35405.36
Thailand	86.93	86.93	179.36	0
Tunisia	22.21	22.21	51.84	0
Turkey	13362.71	358.98	28866	28095.83
Ukraine	8964.97	8964.97	23577.64	0
United Arab Emirates	87.72	87.72	168.64	0
United Kingdom of Great Britain and Northern Ireland	208.12	208.12	907.23	0
Uruguay	0.55	0.55	24.22	0
United States of America	232.04	232.04	562.11	0
Viet Nam	39.37	39.37	86.56	0
Russian Federation	27600.99	27600.99	81328.65	0
Taiwan, Greater China	200.98	200.98	325.9	0
Venezuela (Bolivarian Republic of)	273.19	273.19	868.36	0
North Macedonia	42.08	42.08	67.65	0
Réunion	56.55	56.55	80.21	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Manufacturing	357670	65289
Offices and Warehouses	26225	25077

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	35647	Decreased	6.41	The change in renewable energy consumption comes from the purchased renewable electricity in our manufacturing plant + the generation of renewable energy generated. Our total Scope 1 and 2 emissions in the 2019 was 555,882 tCO2e, therefore a 6.41% reduction $(35,647/555,882)*100 = 6.41\%$
Other emissions reduction activities	92278	Decreased	16.6	The 92,278 tCO2e reduction comes from the relentless drive of our energy saving and efficiency team implementing processes through our Drive for Zero program. Compared to our scope 1 and 2 in 2019, this represents a 16.6% taking in consideration the increased energy demand from our Smoke-Free-Products (the process to manufacture heated tobacco units is more energy intensive than for conventional cigarettes, due to the production of the cast leaf tobacco in the magnitude of three times more energy than conventional products). Our total Scope 1 and 2 emissions in the 2019 was 555,882 tCO2e, therefore a 16.60% reduction $(92,278/555,882)*100 = 16.60\%$
Divestment	0	No change	0	PMI did not have any changes due to change in divestment in 2020.
Acquisitions	0	No change	0	PMI did not have any changes due to change in acquisitions in 2020.
Mergers	0	No change	0	PMI did not have any changes due to change in mergers in 2020.
Change in output	14958	Decreased	2.69	The main driver for this decrease was the impact of COVID 19 pandemic in our fleet emissions which saw a great decline versus 2019, as an impact of the home office but also as a result of the lockdown measures implemented all over the globe and the lower number of kilometres driven by our employees and a decrease in production of our conventional products in volume. This effect offset the ramp up in the production of smoke free products - (the process to manufacture heated tobacco units is more energy intensive than for conventional cigarettes, due to the production of the cast leaf tobacco (magnitude of three times more energy than conventional products)). In 2020, 14,958tCO2e decreased in our scope 1 and 2, compared to a total of 555,882, therefore a $14,958/555,882*100 = 2.69\%$ decrease.
Change in methodology	0	No change	0	PMI did not have any changes due to change in methodology in 2020.
Change in boundary	0	No change	0	PMI did not have any changes due to change in boundary in 2020.
Change in physical operating conditions	0	No change	0	PMI did not have any changes due to change in physical operating in 2020.
Unidentified	0	No change	0	PMI did not have any changes due to change in unidentified in 2020.
Other	9071	Decreased	1.63	Since the beginning of the COVID 19 pandemic, the priority has been to ensure the safety of our employees and their families. The company immediately activated the remote work policy and tools across our operations. With our people staying at home, energy consumption consequently dropped in the offices that stayed completely closed and increased in the facilities that stayed operational, with reduced capacity, due to the intensive operation of the ventilation systems; in total, our emissions from the offices dropped by 31 percent versus 2019. In 2020, 9,071 tCO2e decreased in our scope 1 and 2, compared to a total of 555,882, therefore a $9,071/555,882*100 = 1.63\%$ decrease.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	25466.53	1314775.79	1340242.32
Consumption of purchased or acquired electricity	<Not Applicable>	612693.56	210671.63	823365.19
Consumption of purchased or acquired heat	<Not Applicable>	0	24427.27	24427.27
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	9027.92	<Not Applicable>	9027.92
Total energy consumption	<Not Applicable>	647188.01	1549874.69	2197062.7

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

3763

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

2.29

Unit

kg CO2e per liter

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Bioethanol

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

4184

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

0.0084

Unit

kg CO2e per liter

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Biodiesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

433

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

0.1658

Unit

kg CO2e per liter

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Fuel Oil Number 4

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

24756

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

24756

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

79.1219

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Petrol

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

166654

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

263

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

67.1226

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

943692

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

198243

MWh fuel consumed for self-generation of steam

568056

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

176935

Emission factor

56.5944

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Coal

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

251

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

251

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

93.6827

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

25239

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

25239

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

63.9736

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment

Fuels (excluding feedstocks)

Wood Chips

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

20850

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

61

MWh fuel consumed for self-generation of steam

20788

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor4.2917

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment**Fuels (excluding feedstocks)**

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

150421

MWh fuel consumed for self-generation of electricity

17149

MWh fuel consumed for self-generation of heat

1334

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

74.6978

Unit

kg CO2e per GJ

Emissions factor source

Emission factor provided by UK Government (DEFRA)

Comment**C8.2d****(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	81055.61	81039.98	8985.27	8969.64
Heat	191702.67	191702.67	171.6	171.6
Steam	507603.41	507603.41	17670.14	17670.14
Cooling	582634.38	582634.38	435164.24	435164.24

C8.2e**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.****Sourcing method**

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Czechia

MWh consumed accounted for at a zero emission factor

25207

Comment

Refers to our factory in Czechia

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Lithuania

MWh consumed accounted for at a zero emission factor
24893

Comment
Refers to our factory in Lithuania

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Germany

MWh consumed accounted for at a zero emission factor
16785

Comment
Refers to the factory in Berlin

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Germany

MWh consumed accounted for at a zero emission factor
8935

Comment
Refers to the factory in Dresden

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Germany

MWh consumed accounted for at a zero emission factor
412

Comment
Refers to the offices in Munich.

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Greece

MWh consumed accounted for at a zero emission factor
24944

Comment
Refers to our factory in Greece

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Greece

MWh consumed accounted for at a zero emission factor
344

Comment
Refers to our tobacco warehouses in Greece

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Poland

MWh consumed accounted for at a zero emission factor

67729

Comment

Refers to our factory in Poland.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Portugal

MWh consumed accounted for at a zero emission factor

24177

Comment

Refers to our factory, offices and warehouses in Portugal.

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Romania

MWh consumed accounted for at a zero emission factor

32663

Comment

Refers to our factory in Romania.

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Serbia

MWh consumed accounted for at a zero emission factor

19950

Comment

Refers to our factory in Serbia.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Indonesia

MWh consumed accounted for at a zero emission factor

82000

Comment

This refers to factories in Indonesia.

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Netherlands

MWh consumed accounted for at a zero emission factor

38170

Comment

Refers to our factory in the Netherlands.

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Other, please specify (Wind, marine, solar)

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Italy

MWh consumed accounted for at a zero emission factor

60635

Comment

This refers to our 2 factories in Italy.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Turkey

MWh consumed accounted for at a zero emission factor

27900

Comment

This refers to our factory in Turkey.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Argentina

MWh consumed accounted for at a zero emission factor

18450

Comment

This refers to our factory in Argentina. Note that i-RECs are not available in Argentina. The above certificate have been redeemed from Brazilian registry.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Canada

MWh consumed accounted for at a zero emission factor

11882

Comment

This refers to our factory in Canada.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Solar

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Mexico

MWh consumed accounted for at a zero emission factor

25109

Comment

This refers to our factory in Mexico.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Geothermal

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Philippines

MWh consumed accounted for at a zero emission factor

49521

Comment

This refers to our two factories in the Philippines.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Switzerland

MWh consumed accounted for at a zero emission factor

35074

Comment

This refers to our factory, offices and warehouses in Switzerland.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Wind

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Kazakhstan

MWh consumed accounted for at a zero emission factor

9957

Comment

This refers to our factory in Kazakhstan.

Sourcing method

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Hydropower

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Malaysia

MWh consumed accounted for at a zero emission factor

10606

Comment

This refers to our factory in Malaysia.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Sweden

MWh consumed accounted for at a zero emission factor

55

Comment

This refers to our offices in Sweden.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Croatia

MWh consumed accounted for at a zero emission factor

144

Comment

This refers to our offices in Croatia.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

New Zealand

MWh consumed accounted for at a zero emission factor

72

Comment

This refers to our offices in New Zealand.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Waste

Metric value

3.09

Metric numerator

Waste landfilled or incineration w/o heat recovery

Metric denominator (intensity metric only)

Total waste generated

% change from previous year

1

Direction of change

Decreased

Please explain

The start-up of our new RRP facilities in Italy, impacted our disposal ratio in 2017. Since 2018 we solved this issue and we are back on track, including in 2020, to maintain our long-term target to reduce and keep our disposal to landfill ratio below 5%.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

PMI GHG Verification Statement 2020 external - v3.pdf

Page/ section reference

Page 3: total Scope 1 Page 2 and 3: method and scope

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

PMI GHG Verification Statement 2020 external - v3.pdf

Page/ section reference

Page 3: total Scope 2 market-based and location based Page 2 and 3: method and scope

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

PMI GHG Verification Statement 2020 external - v3.pdf

Page/ section reference

Page 3: total Scope 2 market-based and location based Page 2 and 3: method and scope

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3 (upstream & downstream)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

PMI Scope 3 GHG Verification Statement 2020 - v1.0 .pdf

Page/section reference

Page 1: total Scope 3 Page 2 and 3: method and scope.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISO14064-3	PMI has chosen to verify this data in order to certify our year on year progress on carbon emission reductions in all our operations (factories, offices, warehouses and fleet). PMI GHG Verification Statement 2020 external - v3.pdf
C6. Emissions data	Year on year change in emissions (Scope 3)	ISO14064-3	PMI has chosen to verify this data from our carbon footprint model in order to certify our year on year progress on carbon emission across outvalue chain. PMI Scope 3 GHG Verification Statement 2020 - v1.0 .pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS
Switzerland carbon tax
Ukraine carbon tax

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

20

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2020

Period end date

December 31 2020

Allowances allocated

26157

Allowances purchased

44153

Verified Scope 1 emissions in metric tons CO₂e

46710

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Facilities we own and operate

Comment

The "% scope 1 emissions covered", covers emissions from our manufacturing sites in Italy, the Netherlands and Romania. Additional information: 1. PMI other European manufacturing sites, in 2020 Czech Republic, Greece, and Poland were below combustion capacity threshold to be included in the scheme. Lithuania, Germany and Portugal sites have been delisted from the EU ETS scheme due to the energy reduction programs conducted. 2. Scope 2 not included, only scope 1.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Switzerland carbon tax

Period start date

January 1 2020

Period end date

December 31 2020

% of total Scope 1 emissions covered by tax

0.51

Total cost of tax paid

576754

Comment

Ukraine carbon tax

Period start date

January 1 2020

Period end date

December 31 2020

% of total Scope 1 emissions covered by tax

1.81

Total cost of tax paid

2300

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

European Union Allowances (EUA)'s prices have shown a strong up-moving trend in 2020. The main reason behind this uptrend is an expectation of an unbalanced market on the demand side mainly due to the activity of the EU ETS system to reduce the oversupply number of credits in the market and thus low prices in the past and a high demand of credits on the voluntary market. In order to mitigate this impact reducing energy consumption thorough increasing energy efficiency in our factories is a priority. At PMI, we started in 2012 our Global Energy Management Program paired with local reduction initiatives, targeting energy and CO2 savings to minimize the need for purchasing EUAs. This program represents PMI's main component of its strategy to comply with the relevant ETS. We balance our allowances purchased over a 3-year timeframe. As a result of the efforts, energy reductions have enabled our factories in Portugal, Germany and Lithuania to be removed from the EU ETS scheme in the last 4 years (moving below total combustion capacity thresholds). Regarding emerging regulations, we are monitoring closely and anticipating the strategic position of our manufacturing plant vs. the potential impact of such cap and trade mechanism or carbon tax. For example, with Korea ETS , it is our understanding that a company will be included in the scheme if the average CO2 emission of the last three years is over 125,000 tons/yr. South Korea is a strategic market where we launched our smoke-free products and we may increase production capacity in the future. Considering that currently our activities resume to an average 25,000tons/yr CO2 emissions, we could increase the capacity without immediate threats from such carbon tax. Moreover, through the implementation of our global program "Drive for Zero", we aim to improve efficiency in our manufacturing facilities and eliminate losses, reducing emissions intensity to further mitigate the impact of emerging regulations in South Korea.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Forests

Project identification

myclimate awarded the PMI factory in Klaipeda, Lithuania, PMPSA factory in Neuchatel Switzerland with the claim "climate-neutral factory 2020" and PMI Operations Center offices in Lausanne Switzerland. The climate-neutrality encompasses all scope 1 and scope 2 emissions. The corresponding GHG emissions have been validated and all remaining emissions (i.e., 3297 metric tons CO2e) have been offset with high-quality carbon offset certificates from myclimate. Carbon offset project - Project: Small-Scale Farmers Re-forest Forests in Alimu-gonza & Ongo Forest - Project type: Forest - Project location: Uganda - Project standard: Gold Standard CER - myclimate project number: 7181

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

3298

Number of credits (metric tonnes CO2e): Risk adjusted volume

3298

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive low-carbon investment

Identify and seize low-carbon opportunities

GHG Scope

Scope 1

Scope 2

Application

The underlying concept PMI applies on internal carbon price is to have a visible and fair quantification of the financial impact of emissions to incentivize and increase the viability of actions and investments focusing on their reduction. Integrating carbon pricing in our business decisions will help to: i) Mitigate hidden future risks due to climate change (such as regulations and taxations) by embedding their true impact in the business case of a project or investment, and helping drive and prioritize investments that organically reduce mid and long term CO2 emissions; ii) Allocate sufficient funds to activities aimed at decarbonizing the business and/or offsetting/insetting its emissions; iii) Attract ESG investors positioning PMI as a leading company in environmental sustainability. We have modelled what an adequate Shadow Carbon Price should be for PMI following a robust methodology, concluding that an adequate Shadow Carbon Price for PMI is US\$ 65 per ton of CO2e emitted.

Actual price(s) used (Currency /metric ton)

65

Variance of price(s) used

To define PMI's internal carbon price, the Stiglitz and Stern price corridor has been identified as the "perfect theoretical" solution to set shadow carbon price. On practical implementation to better integrate it to PMI's multi-disciplinary processes and culture, a single shadow carbon price methodology has been designed for easier adoption through internal consultation. The objective of the single price methodology was to keep the robustness and internationally recognized practices, modelling the Stiglitz and Stern references and applying them in a worst case scenario analysis of transition risks projected by 2030, specific to our emission profile and the geographies where we are operating. To do so, the Stiglitz and Stern price corridor assumptions were merged in a single price through the following steps: 1. Each country in which PMI has a manufacturing facility (offices and warehouses were not taking in account) was weighted in ratio to its total carbon weigh taking into account 2019 direct emissions profiles, Scope 1 and Scope 2 location based (i.e.: to not be biased by green electricity purchasing strategies). 2. Each country emission was then divided by the total sum of all countries carbon emission profiles to allocate a carbon intensity to each country. 3. Countries were then split in the (4) categories associated to their risk level in relation to carbon tax or carbon regulations already in vigour or planned to be in a near horizon. PMI integrates in today's shadow carbon price evaluation, the transition risks 10 years in advance for a forward-looking approach. 4. The carbon intensity of each country was then multiplied by the country risk carbon price (value from above table) allocating the respective carbon weighted contribution. 5. The single shadow price was finally obtained by the sum of all the countries carbon weighted contribution and adjusted at the most meaningful close integer. In 2020 exercise, for example, the weighted single shadow carbon price was modelled at \$65.86 per ton of CO2e and therefore the PMI's shadow carbon price was set at \$65 per ton of CO2e. The PMI's shadow carbon price will be revised on an annual basis to track changes in the countries' risk profile and to be adjusted to annual PMI's direct GHG emissions and country specific GHG emission footprint profiles.

Type of internal carbon price

Shadow price

Impact & implication

As an example of internal shadow carbon price usage, in 2020 through our Drive 4 Zero and Energy Saving Initiatives an additional 13 carbon emission reduction projects were approved for a total of 140 projects and a budget of around \$22 million was allocated to support the execution of the projects in our manufacturing sites. Due to the impact of Covid-19 pandemic the finalization of the execution of some projects has been postponed to 2021. Overall, our efficiency initiatives helped drive around 10

percent reduction in carbon emissions across our manufacturing facilities in 2020 versus 2019. The application of the shadow carbon price increases the IRR and reduces the impact of the payback period thus making possible efficiency and emission reduction projects that would not qualify otherwise according to our internal investment policy. Examples of projects that have been approved thanks to the valorisation of the cost of carbon include a project to increase energy efficiency in the Philippines where drastically increased compressed air generation reduces energy consumption, while in Kazakhstan, Pakistan, Argentina and Portugal we reduced the baseload of our plants with a set of selected and impactful interventions. In 2020, in our factory in Neuchâtel we installed pyrolysis technology, which uses operational waste instead of energy generated with fossil fuel to produce steam and hot water, it will be fully operational in 2021. The shadow carbon price made PMI to internalize the costs of externalities in the financial evaluation of the projects, allowed to improve the financial parameters of those projects and served as enabler of the carbon neutrality strategy favoring investments that will organically accelerate the reduction path and support the achievement of our neutrality targets. The internal shadow carbon price has been instrumental to prioritize projects delivering higher impact in carbon reduction emissions. Embedding an internal shadow carbon price in the financial decision, contributes to raising awareness to invest in environmentally conscious and low carbon technologies.

Objective for implementing an internal carbon price

Change internal behavior
Drive low-carbon investment
Identify and seize low-carbon opportunities
Supplier engagement

GHG Scope

Scope 1
Scope 2
Scope 3

Application

Carbon Levy is recognized as one of the main instruments used by corporates to account for the cost of the negative externalities of carbon emissions in business and internal expenditure decisions. A carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of supporting behavioral change, the levy is collected in a climate fund (PMI Portfolio of Climate Investments), which will finance high-quality carbon insetting and/or offsetting projects. The Carbon Levy mechanism has been approved by Company Management in the course of 2020 and consequently implemented in our expenditure process to reduce carbon emissions and increase energy efficiency.

Actual price(s) used (Currency /metric ton)

8

Variance of price(s) used

We do not forecast to apply a variance in price. A fix price will be implemented throughout our business overtime, on direct and indirect emission beginning with selected business units (i.e., Scope 1 and 2 emissions and emissions from business travel). The price will be recalibrated every year to reflect PMI emission profile and reduction forecast in 2030.

Type of internal carbon price

Internal fee

Impact & implication

A carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of supporting behavioral change, the levy is collected in a dedicated climate fund (PMI Portfolio of Climate Investments), which will finance high-quality carbon insetting and/or offsetting projects. PMI's carbon levy helps size the investments required today to abate our emissions through offsetting (e.g., acquisition of green certificates) or in-setting initiatives (e.g., agroforestry projects, and carbon sequestration programs). We have modelled what the carbon levy should be for PMI basing our calculation on data on the forecasted voluntary carbon market prices, our CO2 compensation profile (i.e., the number of tons of CO2 to be compensated through offsetting/in-setting investments), our carbon neutrality time horizon, and the compensation strategy we want to adopt. We started implementing our carbon levy in 2020 within the business functions accounting for the bulk of our direct emissions, such as our manufacturing sites, offices, and fleet, to form a budget that will be conducive to set up a PMI portfolio of climate investments to compensate remaining unavoidable CO2 emissions and achieve carbon neutrality. The Carbon Levy mechanism has been approved by Company Management in the course of 2020 and consequently implemented in our expenditure process to reduce carbon emissions and increase energy efficiency.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

91

% total procurement spend (direct and indirect)

43

% of supplier-related Scope 3 emissions as reported in C6.5

89

Rationale for the coverage of your engagement

Suppliers' engagement covers all tobacco supply chain including 285,900 tobacco farmers and leaf suppliers, direct material suppliers (around 75% of total spend with material suppliers), and the majority of our main electronics and logistics services providers. We have used our carbon footprint model to identify the main contributors in terms of emissions within our purchased material categories. For direct materials (non-tobacco), we have identified acetate tow and consumer board and paper, fine papers used for cigarettes and heated tobacco products, flexible packaging as well as chemicals and ingredients as significant contributors to our carbon footprint and we have therefore prioritized engagement with relevant suppliers. Since 2014 we have engaged with our suppliers through direct discussions and through CDP Supply Chain program, focusing, among others, on information collection. We have invited suppliers of tobacco, paper/board, acetate tow, fine papers used for cigarettes and heated tobacco products, flexible packaging as well as chemicals and ingredients distribution/logistics, electronics and some others to share primary data with us to improve the accuracy of our carbon footprint model in 2020 and beyond. In the medium to long term, we will use this forum to drive improvements towards our carbon neutrality commitments across our value chain (scope 1+2+3) by 2050. Main engagement areas: • Tobacco leaf suppliers – through Good Agricultural Practices (GAP) program which includes mandatory requirements for managing energy and climate change (mitigation and adaptation), and reporting against the indicators defined in GAP. • All other non-leaf suppliers – in 2017, we released our Responsible Sourcing Principles (RSP) and Implementation Guidelines, that are applicable to all suppliers doing business with PMI and which encourages our suppliers to minimize their energy use and GHG emissions. We aim to influence their behavior through procurement and product development activities. One of the outcomes of the information collection, beyond understanding our supplier's behavior and measurable progress, is the definition of parameters of environmental performance for different raw material components to allow the improvement of our engagement and reporting in the future.

Impact of engagement, including measures of success

Our measure of success is to achieve at least 80% response rate in CDP supply chain program. In 2020 the outcome of this engagement was 100% response rate, allowing PMI to be listed in CDP Supplier Engagement Leaderboard. The information received from CDP supply chain program was used to fine tune our carbon footprint model in 2020. We engaged suppliers to collect primary data, CO2 emissions reduction strategy, and projects' glidepath pertaining to our direct materials, with 14% increase of suppliers engaged (vs. previous year in number of suppliers). The CO2 emission reductions in our direct materials supply chain contributed to 21% of our 2020 reduction across our value chain. PMI recently established new and more ambitious carbon neutrality targets. To support the achievement of these targets, we will further expand this supplier engagement to other supply chain material categories. Our tobacco suppliers are contractually required to implement our Good Agricultural Practices (GAP) program. To assess suppliers' conformity against GAP, the Sustainable Tobacco Program (STP) is used, incl. an annual supplier's self-assessment and on-site reviews. Suppliers report on metrics and performance related to water and GHG emissions reductions, among other environmental indicators. Access to this data allows for internal benchmark, as well as selection and deployment of strategic initiatives with suppliers. We expect our suppliers to demonstrate yearly continuous improvements, which are reflected in suppliers' scorecards, together with STP assessments results, and used to make future decisions such as tobacco purchase volume allocation through our supplier base. GAP is also the foundation to increase resilience of tobacco crops to climate change. Our measure of success was to reduce the GHG emission intensity related to tobacco curing by 70% by 2020 vs. 2010 baseline. We have reached 77% reduction in 2020 and we have set a new target to reduce 75% intensity emissions due to tobacco curing by 2025 vs. 2019 baseline. A monitoring and verification framework was launched in 2016 across our tobacco supply chain to monitor and verify the impact of the initiatives being implemented. These initiatives support the achievement of our target by eliminating the use of coal and non-sustainable firewood, promoting the use of alternative wood fuels and improving curing efficiency.

Comment

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

% of suppliers by number

93

% total procurement spend (direct and indirect)

87

% of supplier-related Scope 3 emissions as reported in C6.5

89

Rationale for the coverage of your engagement

PMI's approach to sustainable supply chain includes a range of compliance programs that are expected to be fully met by our suppliers, allowing us to engage with them at different levels and stages of the value chain. Our Responsible Sourcing Principles (RSP) and Implementation Guidelines establish the foundation for a more comprehensive and systematic approach to addressing supply chain sustainability beyond our agricultural supply chain. The RSP is available in 26 languages and covers environmental, social, and governance topics, encouraging suppliers to review, identify and minimize their environmental impacts, especially regarding land use, waste, emissions, energy and water consumption. The RSP applies to all suppliers and service providers, including our tobacco suppliers. The prioritization for direct engagement is based on spend and suppliers having the biggest potential environmental impacts through their business activities; e.g., engaging with them to decrease their emission will have a major impact on our indirect emissions reduction. Through our Good Agricultural Practices (GAP) program, specific requirements are implemented in our agricultural supply chain, fostering collaboration not only to address climate change related risks, but also in other areas that may have a positive impact on our business and create value to society. This is an opportunity for PMI to build a stronger and more resilient value chain and to be positioned as a leading company in sustainability by collaborating with its tobacco suppliers to implement actions for a more sustainable future. To monitor the adherence of our suppliers to the RSP and GAP requirements, we have set up several processes and systems. STEP (Sustainable Transformation Enables Performance), the supplier due diligence and performance program to achieve supplier compliance with our RSP, is implemented since 2019. It serves as the backbone for sustainably managing our first-tier suppliers; in some cases, second-tier suppliers are also included with a target to source sustainably from all our critical suppliers by 2025 to ensure their social, business and environmental integrity alignment to RSP. In addition to STEP, we engage with suppliers on more specific sustainability issues, train and empower suppliers, and conduct assessments and audits through third parties.

Impact of engagement, including measures of success

PMI has two functions responsible to procure goods and services; the Procurement function, sourcing all material and services for the company excluding tobacco and clove which fall under the sourcing responsibility of the Leaf function. We engaged with suppliers of all Procurement Categories accounting for a procurement spend of 85%. Leaf function engaged with all its suppliers covering the 100% of the Leaf spend. Therefore the total coverage is 87% of the spend [Procurement 85%+ Leaf 100% = 87%]. In 2020, PMI engaged with a base of suppliers focusing on criticality (above \$0.5 million in spend and providers of essential components/non substitutable) as part of its STEP program; allowing us to cover 95% of our critical Direct Materials Spend and 15% of our Indirect Materials and Services Spend. During the year, we embarked on a reassessment of our STEP platform to address our evolving needs and reflect market developments. Further, we considered how to optimize efforts for both our company and our suppliers, through a collaboration-promoting tool that enables us to share assessments across companies and industries, and we plan to start the implementation of a new solution in 2021. Our analysis also focused on enhancing the management of online evaluations and on-site audits. With regard to on-site audits, we also plan to select and partner with several specialized providers. Within our tobacco supply chain with the implementation of GAP and strategic initiatives to reduce carbon footprint, PMI aims to further reduce its carbon footprint by focusing on most emitting processes, such as tobacco curing, where upgrading tobacco barns to increase curing efficiency and replacing fossil fuels with biomass as curing fuel sources has led to significant emission reductions in the past years (in 2020 77% reduction vs. 2010 baseline). Through such strategic initiatives engagement with our suppliers remains a priority and a key contributor to reach PMI's more ambitious targets in our decarbonization journey with further reductions in absolute CO2 emissions to be set in linewith our science-based targets for a 1.5-degree scenario, which were approved by SBTi in 2020.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Other, please specify (Collaborating with tobacco leaf suppliers to reduce climate impacts from agricultural supply chain.)

% of suppliers by number

90

% total procurement spend (direct and indirect)

12

% of supplier-related Scope 3 emissions as reported in C6.5

25

Rationale for the coverage of your engagement

PMI's suppliers' engagement through the collaboration with leaf suppliers to reduce climate impacts from agricultural supply chain covers all tobacco supply chain including 285,900 tobacco farmers and tobacco leaf suppliers. We have used our carbon footprint model to identify the main contributing processes in terms of GHG emissions within our tobacco supply chain, which inform company's decision towards internal investment and focus areas for joint project development and implementation with our leaf suppliers. Through PMI's Good Agricultural Practices (GAP) program, a set of mandatory requirements are implemented by all leaf suppliers, encompassing several actions areas (from environmental practices to human rights). Furthermore, GAP sets out best practices, for example, towards more resource efficient technologies (e.g., improved tobacco curing practices) and innovative solutions (e.g. irrigation methods). One of the outcomes of the strong collaboration with our leaf suppliers is the significant reduction in GHG emissions from the tobacco curing process in recent years.

Impact of engagement, including measures of success

Our measure of success is the continuous CO2 emission reductions within our leaf supply chain, which drive a positive trend in decreasing our Scope 3 indirect emission. This is the successful result and direct impact of the collaboration with our suppliers worldwide in different action areas, from tobacco curing to fertilizer application and mechanized activities. To assess suppliers' conformity against GAP, the Sustainable Tobacco Program (STP) is used, including an annual supplier's self-assessment and on-site reviews performed by an independent company. Suppliers report on metrics and performance related to water and GHG emissions reductions, among other environmental indicators. Access to this data allows for internal benchmark, as well as selection and deployment of strategic initiatives in collaboration with suppliers. We expect our suppliers to demonstrate yearly continuous improvements, which are reflected in the suppliers' scorecards, together with the STP assessments results, and used to make future decisions such as tobacco purchase volume allocation through our supplier base. GAP is also the foundation to increase resilience of tobacco crops to climate change. We have a measure of success to reduce the GHG emission intensity related to tobacco curing by 70% by 2020 vs. 2010 baseline, and we were able to achieve 77% reduction, exceeding our target. To continue focusing on improvements we have set a new target to reduce 75% tobacco curing carbon emissions per ton of flue cured tobacco by 2025 vs. 2019 baseline. A monitoring and verification framework was launched in 2016 across our leaf supply chain to monitor and verify the impact of the initiatives being implemented. These initiatives have supported the achievement of our target by aiming at eliminating the use of coal and non-sustainable firewood, promoting the use of alternative wood fuels and improving curing efficiency.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

75

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

We engage 100% of our consumers (i.e., please read same as customers) on climate-related issues as we recognize that increased climate action expectations and shifting consumer preferences are important for us. Consumer related emissions are 75% of total downstream emissions (Use and End of Life of product categories). Failing to develop an effective GHG emission reduction strategy that addresses impacts from direct operations and supply chains, as well as developing products that are environmentally friendly, can have significant impacts on our operations. Additionally, our consumers insights on our climate targets, performance and products can help us understanding our market potential and further opportunities. For these reasons, we engage 100% of our consumers through several direct and indirect initiatives, incl. raising awareness on environmental issues through education campaigns, as well as sourcing agri-commodities and developing innovative and environmentally friendly products. Our strategic business transformation towards a smoke-free future, replacing cigarettes with RRP, has changed our operating model, organizational structure and culture and accelerated our evolution to a consumer-centric, technology and science-driven company. Beyond offering smokers less harmful alternatives to cigarettes, we also aim to reduce our products' environmental footprint by integrating circularity considerations at the design stage and strengthening our used devices collection and recovery programs. LCA is integrated in our R&D processes, and we develop LCAs for RRP to assess the impact of these new products may have on our carbon footprint. The increasing relevance of RRP within our product portfolio, will enhance focus on these product's eco-design and their potential environmental impacts, with additional steps to our product development process to mitigate them. As part of our business transformation we strive to continuously share our efforts on sustainability and climate-change related issues, engaging with all our stakeholders, including consumers, by means of publicly disclosing our annual Integrated Report, communication campaigns and our CDP disclosures, demonstrating our achievements related, for instance, to our Science Based emission reduction Targets. A specific sustainability branding campaign regarding our RRP was developed in 2020.

Impact of engagement, including measures of success

PMI measures success of its engagement activities in multiple ways. When it comes to educating our consumers (i.e., please read same as customers) on the climate related impacts from PMI's products, the company relies on the usage of online platforms and other materials as the main method of engagement. In this context, our measure of success is based on two components: 1) PMI's ability to provide clear and transparent information regarding the direct and indirect climate impacts from its global operations; 2) having an increasing share of customers accessing climate-related resources and/or participating in related surveys. In 2020, our second Integrated Report explains PMI's dependency on the environment, as well as how the company creates social, environmental and economic value. By transparently disclosing our direct and indirect climate impacts, explaining how we integrate Life Cycle Analysis (LCA) in the development of our products as well as our climate ambitions and progress, we provide our consumers with a clear understanding of the impacts from our products and our strategy to reduce them. To better understand how consumers' access to these resources' changes over time, PMI monitors visits to its sustainability pages at pmi.com. After launching our Integrated Report 2020 as a full online version, traffic to the sustainability section increased by 83.8% compared to the previous year. Downloads increased by 55.9% compared to 2019, with the Integrated Report 2020 making up 78.4% of the total downloads. Another example of PMI's engagement is the use of surveys. PMI carried out 4 large scale surveys during 2020 with 13575 users in 4 key RRP markets. Results from these surveys provided valuable insights on our consumers' perception and evaluation of PMI Sustainability efforts, with over 95% of them having improved or unchanged brand perceptions after learning about PMI sustainability initiatives; results also indicated that environmental and social initiatives were highly appreciated (including device repair, eco-certified devices made out of sustainable materials, used consumables proper disposal, packaging minimisation as well as carbon neutral manufacturing and effective waste management). This feedback enabled PMI to quantify potential market benefits from these products and integrate them in the design of our RRP roadmap and branding campaign.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

In our value chain we engage with our employees and global partners through a two-folded strategy that focuses on training initiatives and continuously renewing our fleet to more eco-friendly vehicles. In some countries where we operate, eco-driving training is conducted to promote more environmental-friendly practices by our drivers, resulting for example in fuel savings, and consequently reduction in carbon emissions and air pollutions at local level.

Driving efficiency in reducing carbon emissions is key in all business areas of PMI that contribute to the carbon footprint of the company.

Our fleet carbon emissions are really important to address because they constitute a daily and constant impact to the environment and because showing leadership in tackling fleet carbon emissions is a tangible action and demonstration of sustainability leadership, as well as it is an important driver of behavioural change since cars are part of the daily routine of the employees in the majority of the markets where PMI operates. Transformation strategies start from behavioural changes and PMI wants to be a catalyst in each area of improvement.

Since 2020, in Israel, Brazil, Indonesia and Turkey e-learning programs are being conducted with 800 drivers, and the long term plan is to cover the entire PMI fleet drivers by 2024. We are also implementing telematics in our working tool fleet with the plan to have 18,000 vehicles covered by the end of 2023 and drivers trained on the best approach to driving.

Our new Principle and Practice for Global Fleet Vehicles defines maximum emissions caps for all new PMI's vehicles (excluding trucks and motorcycles) used by PMI's employees. In 2020 we have defined that all new vehicle purchases as of the beginning of 2021, in the EU region must be hybrid, plug in hybrid or electric. By 2024 a minimum of 24% of PMI's total fleet will be converted to hybrid. We also developed the "Moving first towards a safer, smoke free fleet" campaign to engage our employees worldwide including the benefit of switching to more eco-friendly vehicles and best approach to driving.

These initiatives will contribute to the overall reduction in our fleet emissions from the 2019 baseline which we assess as measure of success of the engagement and the overall strategy.

PMI has a fleet of around 23,000 vehicles used for delivery, sales, and other services, out of which approximately 700 are "green" vehicles, either electric, hybrid or emitting less than 80 g/km of CO2 for cars or vans and less than 600 g/km of CO2 for trucks.

Our fleet emissions account for about 27% of our direct (scope 1) GHG emissions. In 2020, we decreased the absolute CO2e emissions from our fleet by 26% versus 2019. This reduction is a combination of good vehicle maintenance, ongoing switch to hybrid more fuel-efficient vehicles, eco-driving behaviours and the impact of reduced kilometres due to COVID 19 pandemic.

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number

MP1

Management practice

Other, please specify (Responsible Sourcing Principles)

Description of management practice

In 2017, we launched our Responsible Sourcing Principles (RSP) and Implementation Guidelines, which established the foundation for a more comprehensive and systematic approach to addressing supply chain sustainability beyond our agricultural supply chain. The RSP provides our suppliers with PMI's expectations in the areas of human rights, environment, and business integrity. The environment section covers environmental compliance and management, and resource consumption and waste minimization. In the area of climate change, our RSP encourages suppliers to review, identify and minimize their environmental impacts, especially regarding land use, waste, emissions, energy and water consumption. Our RSP also encourages supplier set targets for improvement, measure performance and report on them.

Your role in the implementation

Operational

Explanation of how you encourage implementation

The RSP applies to all suppliers doing business with PMI but tobacco farmers. In addition tobacco suppliers and their farmers follow our Good Agricultural Practices (GAP) program and Agricultural Labor Practices Code. In 2017 we rolled out the RSP to global partners covering 99% of our total spend on global vendors by December 2017. To monitor the adherence of our suppliers to the RSP, in 2020 we continued the roll out of STEP (Sustainable Transformation Enables Performance), the supplier due diligence and performance program, with the aim to regularly evaluate suppliers' status in social, environmental, and business integrity compliance and to address gaps within our RSP or other commitments. STEP is based on the risk management approach that guides our supply chain due diligence management framework. It is the backbone for sustainably managing our first-tier suppliers; in some cases, second-tier suppliers are also included. Through STEP, suppliers are requested to answer a set of questions related to environmental compliance including if they have in place a procedure to regularly update their register of applicable environmental legislation and regulations, through which the compliance with regulations and/or mandatory standards are addressed. In addition, high-risk suppliers undergo a desktop audit. According to the questionnaire results and, as applicable, desktop audit, the supplier risk profile may be re-evaluated and require further due diligence. E.g., a medium-risk supplier that did not achieve the minimum acceptable RSP compliance will be required to undergo a desktop and/or an on-site audit. Following both types of audits, corrective action plans are defined and implemented. PMI considers these programs and tools to be sufficient to ensure legal compliance within operations and supply chain, as these are aligned with all local regulation as well as PMI's policies, often more stringent. Our final objective is to support suppliers to continuously improve their practices to meet our requirements and improve the overall working and living conditions within our supply chain. Tracking and reporting on our suppliers' performance, both internally and externally, will drive transparency. In addition, we will continue to look for further opportunities to collaborate with our suppliers in specific projects to improve their sustainability performance.

Climate change related benefit

Emissions reductions (mitigation)

Increasing resilience to climate change (adaptation)

Comment

Management practice reference number

MP2

Management practice

Other, please specify (Good Agricultural Practices Program)

Description of management practice

Tobacco growing, harvesting and curing account for around 23 percent of our carbon footprint. We are working with farming communities to reduce the environmental footprint of tobacco curing and growing. We do that through our Good Agricultural Practices (GAP) program and strategic initiatives such as curing barn improvements and reforestation. GAP lays out extensive agricultural environmental practices for farmers to adopt; these practices cover effective farming techniques, the safe storage, handling and use of chemicals (crop protection agents), water and waste management, energy and raw material efficiency. GAP also covers soil management/conservation, biodiversity and the sustainable use of wood. GAP implementation helped us deliver on our 2020 target for CO2 reduction in our value chain.

Your role in the implementation

Financial

Knowledge sharing

Explanation of how you encourage implementation

We mandate GAP implementation for all PMI tobacco suppliers. Our Leaf department supports our suppliers in implementing GAP and, where we directly contract farmers, our field technicians provide direct support and recommendations. We allocate an annual budget to initiatives to catalyze the adoption of improved and innovative practices by the farmers in our supply chain (i.e.: in 2020 \$5 million for initiatives specific to environmental related topics such as climate change, water security and combat deforestation). Similar yearly expenditure is expected over the next 10 years.

Climate change related benefit

Emissions reductions (mitigation)

Increasing resilience to climate change (adaptation)

Comment

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Yes

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

Other

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

U.S. Council for International Business (USCIB)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

One of the main areas of focus of the USCIB is sustainable development. They state that the "economic growth and energy of the U.S. depends on international regulations that promote strong private-sector role in wise management and use of resources, effective environmental stewardship and greener growth and needs: (1) Sustainable Cost-effective, science and risk-based cooperative environmental and energy policies to address the challenges of climate change while protecting energy security, promoting innovation and efficiency and advancing resilience to climate impacts; and provide multilateral solutions to trans-boundary environment, energy and climate challenges, and reject unilateral, arbitrary measures that disqualify technology or energy options; and (2) Pro-growth, market oriented policies that promote sustainable development to develop multilateral and national partnership frameworks to incentivize private sector involvement in sustainable development planning, implementation and risk allocation minimization; and maintain technology neutral policies and other enabling frameworks to encourage trade and investment in cleaner technologies and energy sources.

How have you influenced, or are you attempting to influence their position?

Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

Trade association

National Center for Asia-Pacific Economic Cooperation

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

APEC have supported the development of an energy strategy study which includes: "Expand and Diversify Supply of Energy Resources; Promote Conservation and Improve Efficiency; Promote Open and Efficient Energy Markets; Clean Energy Use and Technology Innovation."

How have you influenced, or are you attempting to influence their position?

Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

Trade association

US ASEAN Business Council

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Their Energy Committee covers broad energy improvement topics including energy efficiency and renewables.

How have you influenced, or are you attempting to influence their position?

Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

Trade association

EconomieSuisse

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Energy and Environment section: "Climate protection concerns us all and Swiss business is pointing the way. Based on voluntary measures it has successfully charted a path of CO2 reduction and continues to stay the course. Innovation in this sector is doubly advantageous: resource-friendly processes help cut costs and may evolve into business ideas. Regardless of any decision for or against certain technologies we promote a reliable, affordable, and environmentally friendly energy supply."

How have you influenced, or are you attempting to influence their position?

Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

Trade association

U.S. Chamber of Commerce

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The U.S. Chamber of Commerce supports U.S. participation in the Paris Agreement. The Chamber is an official observer to the United Nations Framework Convention on Climate Change (UNFCCC) and continues to work with its overseas partners to pursue international collaboration between governments and businesses. As part of the ongoing efforts, the U.S. Chamber has launched a Member Task Force on Climate Action to help better understand the range of mechanisms, innovations, and internal processes that businesses are engaging to confront climate change. The Chamber believes that effective climate policy should require strategic government support, including robust federal programs that help companies develop and adopt commercially viable clean energy technologies, embrace innovation and improve energy efficiency on both supply and demand; and promote climate-resilient infrastructures.

How have you influenced, or are you attempting to influence their position?

Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

(C12.3e) Provide details of the other engagement activities that you undertake.

We work with environmental organizations and governments to support communities on environmental sustainability topics including sustainable forestry, reforestation, controlled use of pesticides in agriculture, sustainable rural living conditions and education; all of these can have an influence on climate change mitigation and adaptation. In 2020, PMI supported projects to protect and enhance natural resources, implemented conservation agriculture, provided clean water, catered for food security, and improved the livelihoods of people living in rural communities. Our efforts to replace cigarettes with smoke-free products will require less tobacco and reduce the associated carbon emissions to tobacco curing. Where farming is the only alternative for former tobacco farmers we are proactively supporting crop diversification to prepare farmers to a market shift. We work with our tobacco suppliers and their farmers to introduce complementary crops for food and for additional sources of income. Complementary crops identified are now expanded to commercial levels, while trials remain to identify better high-yielding, disease-resistant, and drought-tolerant varieties of groundnuts and soybeans amongst others. Water is key to the success of these initiatives as it gives the smallholder farmer the ability to grow crops outside the rainy season. We promote and test solutions collaborating with companies specialized in precision irrigation promoting technological solutions with the characteristics of being feasible at low capital cost such as gravity drip irrigation, solar powered water pumps, rainwater harvesting and different irrigation technologies. Climate change will increase the frequency and severity of extreme weather events and as first measure of support community investments help manage social and environmental impacts associated with our value chain. In 2020, we continued supporting multi-stakeholder initiatives on environmental topics by, for example, further participating in the Brazilian Business Commitment to Water Security, a coalition of companies led by the Brazilian branch of the World Business Council for Sustainable Development. Our commitment includes the implementation of the Alliance for Water Stewardship (AWS) Standard in our Brazilian factory and a partnership with tobacco growers to restore degraded river banks and protecting water streams (Water Guardian Project).

We know that partnership is critical to successfully addressing climate change and achieving UN SDG 13 (“take urgent action to combat climate change and its impacts”). PMI partners, supports, participates, and is a member of sustainability-related initiatives and organizations such as the World Business Council for Sustainable Development (WBCSD), Business for Social Responsibility (BSR), CSR Europe, and the We Mean Business coalition, which harness the power of collaboration to implement solutions at scale. In 2020, our CEO joined CEOs from over 170 businesses, investors, and business and investor networks, in an open letter to call on EU policymakers to support an EU 2030 GHG emissions reduction target of at least 55 percent. Moreover, following the establishment of our new science-based emissions reduction targets consistent with keeping global warming to 1.5 degrees Celsius above pre-industrial levels, we signed the Business Ambition for 1.5°C commitment—responding to the call-to-actions for companies to step up their ambition for the best chance of tackling the climate crisis. Our affiliates also belong to national business associations that are engaging with governments to advance progress on climate protection at the local level.

C12.3f**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

PMI operates within an overarching Code of Conduct to a set of internal policies, which we call our Guidebook for Success, complemented by a broader number of internal policies. These policies cover our mandatory requirements and processes in relation to environment, health and safety (EHS) and sustainability, which includes our climate change strategy; corporate contributions; and interaction with government officials, among others. Our engagement activities take place across all relevant business functions and geographies where we operate and are consistent with our climate change strategy. In line with our intention to advance progress in achieving SDG 13 (take urgent action to combat climate change and its impacts), as business leads the transition to a low-carbon economy, PMI supports and is member of sustainability related organizations who help harness the power of collaboration to implement solutions at scale. We believe that partnerships and collaborative efforts can help changes happen faster and go further. Our affiliates are also members of national business associations which are engaging with governments to advance progress on SDG 13. We conduct due diligence to ensure consistency with our Code of Conduct and Responsible Sourcing Principles (RSP), and to check potential compliance and reputation issues when joining trade associations. We belong to many carefully selected business and trade associations around the world. We work with these groups because they represent our industry and the larger business community in policy discussions on issues where we have a common interest or objective. Our support to these organizations and groups is designed to comply with applicable laws and our own principles and practices. We routinely evaluate our participation to ensure that the groups’ objectives align with the long-term interests of PMI and its stakeholders, and that their activities continue to reflect PMI’s values and high standards of conduct. There are times when we may not agree with certain positions adopted by the organizations we support. In these instances, we may choose to withdraw our participation or support. Other external facing activities related to climate change are also reviewed by our External Affairs and Sustainability Team to ensure consistency with our climate change strategy. In early 2019 the Chief Sustainability Officer (CSO) role was formally established in the company. PMI’s CSO reports to our CFO and leads the strategy of integration of the most relevant sustainability topics, as prioritized based on PMI sustainability materiality assessment and including climate-related issues, across our business. PMI’s CSO heads and manages PMI’s Corporate Sustainability Team, reports on progress to the Sustainability Committee on a quarterly basis and updates on progress the Board of Directors at least once a year.

From an operational perspective, our Operations Sustainability and Corporate Sustainability functions coordinate the company’s climate change mitigation actions. Most of the coordination takes place in the context of sustainability working groups and with local market coordinators. This helps ensure that any policy, engagement activities from any business division or geography remain consistent with global strategies, including our company’s strategy on climate change; and that programs can be implemented at the market level and local realities are reflected in our global efforts. We have embedded Climate protection within our overall business strategy, our Guidebook for Success (Code of Conduct), our PMI’s Environmental Commitment, our Responsible Sourcing Principles (RSP) and Good Agricultural Practices (GAP). We have integrated climate-related issues into normal business activities, it forms part of our annual Long-Range Planning process which reviews and sets business direction, objectives and performance appraisal process. In 2020, the strategy was developed/reviewed based on prior year performance, sustainability commitments and objectives, regulatory/external developments, risk/opportunity assessments, stakeholder interest and business changes, through functional management teams across business divisions and geographies up to our Company Management.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

pmi_2020_annualreport_10k.pdf

2021-proxy-statement.pdf

pmi-integrated-report-2020.pdf

Page/Section reference

Integrated report: summary of financial, environmental incl. climate change, social and governance performance p4-5, commentary from the Executive Chairman and CEO p6-7, details on environmental performance p98-126. Annual Report on Form 10-K: response to environmental regulation incl. climate change; p4-5, climate-related risks and their potential impact on the supply chain p10. Proxy statement, filed with the U.S. Security and Exchange Commission: summary on sustainability performance p12-13.

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

PMI has an Integrated Report in place which describes how the company creates value over the short, medium and long terms. Additionally, PMI integrates climate-related elements regarding the company's climate related risks and response as part of its Annual Report on Form 10-K and Proxy Statement, filed with the U.S. Security and Exchange Commission. In its journey towards integrated reporting, PMI published its Integrated Report in 2020 in accordance with the GRI Standards: core option, which includes an integrated overview of PMI's performance, covering, among others, also financial information. Its contents are shaped by a formal materiality assessment, which takes into account stakeholder perspectives as well as our impacts on sustainable development. Climate protection is assessed as tier 1 topic for PMI, for which an extensive program is in place. We periodically conduct a climate change risks and opportunities assessment to fully understand PMI's impact across our entire value chain. This work aligns with international expectations such as the Paris Agreement to mitigate and adapt to climate impacts. Scenario analysis formed part of the climate change risks and opportunities assessment we conducted in 2015 on physical risks and opportunities. Throughout 2018 and 2019, we updated that earlier risk assessment, and confirmed the outcomes in 2020, accounting for changes in PMI's footprint and business model that led to define 2019 as our new baseline year for our decarbonization targets, including the validation of our revised Science Based targets based on the 1.5 °C trajectory. Our objective is also to further align our work and reporting with the recommendations of the TCFD, which aims to foster voluntary climate-related disclosures that provide clear, reliable, and useful information to the financial community. The updated assessment identified climate change risks and opportunities (CCRO) that align with the TCFD transition and physical risk categorizations. Throughout this process, we mapped 149 CCROs across materiality and certainty and then divided them according to PMI's risk categories: proactive, reactive, nonmaterial, watch, and potential quick wins, so we could better integrate them into the business. After further analysis, it was decided to prioritize the proactive CCROs, as they have the highest certainty and materiality levels.

C13. Other land management impacts

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number

MP1

Overall effect

Positive

Which of the following has been impacted?

Other, please specify (Environmental Management)

Description of impacts

In addition to greenhouse gas emissions, environmental impacts of our suppliers can include impacts to: • Air, such as through sulfur dioxide emissions from burning fuel oil in boilers which can lead to acid rain; • Water, such as wastewater discharge from plating operations, which can lead to poisoning of fish and metal contamination of plants; • Soil, such as through leakages from storage tanks which could lead to soil contamination

Have any response to these impacts been implemented?

Yes

Description of the response(s)

The environment section of our Responsible Sourcing Principles (RSP) and Implementation Guidelines covers environmental compliance and management, and resource consumption and waste minimization. Our RSP encourages suppliers to review, identify and minimize their environmental impacts.

Management practice reference number

MP2

Overall effect

Positive

Which of the following has been impacted?

Biodiversity

Soil

Other, please specify (Human Health & Labor Practices)

Description of impacts

The environmental impact of tobacco farming can be significant, and the GAP program is therefore crucial for managing and reducing our overall environmental footprint. In addition to greenhouse gas emissions, traditional tobacco farming uses hazardous Crop Protection Agents (CPA) that have adverse impacts on biodiversity, soil, water and human health.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

Due to the nature of PM's business, there are no significant impacts on biodiversity or deforestation from our own operations. Where we do have a larger role to play on biodiversity is in our agricultural supply chain. Impacts linked to tobacco farming are addressed through our Good Agricultural Practices program for tobacco suppliers, where we describe our requirements for good environmental practices, including integrated pest management and soil conservation practices, as well as biodiversity management. GAP provides guidance on biodiversity management practices and requires our tobacco suppliers to develop and implement a biodiversity management plan that incorporates, and goes beyond compliance with the applicable laws, and regulations for tobacco- and forest-growing areas. Tobacco production areas must not be located in places that could cause negative effects on national parks, wildlife refuges, biological corridors, forestry reserves, buffer zones, or other public or private biological conservation areas.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Philip Morris International Inc. (PMI) is a leading international tobacco company. PMI has its executive headquarters in New York, US, its primary listing on the New York Stock Exchange (NYSE: PM), and its Operations Center in Lausanne, Switzerland. PMI manufactures and sells cigarettes, smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside of the U.S. We have a wide range of cigarette brands, including the world's best-selling international cigarette Marlboro. Our smoke-free product portfolio includes heat-not-burn and nicotine-containing vapor products. In 2020, PMI net revenues amounted to USD 28.7 billion excluding excise taxes on products worth USD 47.4 billion, on a like-for-like basis; 23.8% of PMI's net revenues in 2020 related to the sale of smoke-free products. PMI's 2020 total shipment volume for combustible products and smoke-free products was 730 billion (654 billion combustible products and 76 billion smoke-free products).

We are building our future on smoke-free products that are a much better consumer choice than continuing to smoke cigarettes. Our vision is that these products ultimately replace cigarettes to the benefit of adult smokers, society, our company and our shareholders. This ambition is at the very core of our corporate strategy and sits atop our sustainability priorities. For PMI, sustainability is an opportunity for innovation, growth, and long-term value creation, and a means to minimize the negative externalities associated with our products, operations, and value chain while maximizing operational efficiency and resource allocation. We have a global footprint: as of December 31, 2020, PMI had a workforce of close to 71,000 people worldwide and operated 39 production facilities globally. In 2020, our tobacco was sourced from over 285,900 contracted farmers across 23 countries, and our products were sold in over 175 markets.

Our sustainability materiality analysis helps us prioritize our focus where we can have the greatest impact. Climate protection, littering prevention and product eco-design and circularity are tier 1 environmental topics that are prioritized in our sustainability strategy.

Engagement beyond our own operations is key, as this is where the most significant sustainability impacts occur, especially when it comes to climate change and carbon emissions.

Our business has a significant, global supply chain organized by five main categories:

1. Agricultural products, including tobacco and other agricultural products, such as clove, menthol and guar gum.
2. Direct materials used to produce cigarettes and other tobacco products, such as acetate tow (for cigarette filters) and paper (both cigarette paper and for packaging materials).
3. Machines for our cigarette and heated tobacco products factories.
4. Electronic devices for heated tobacco and vapor products.
5. Goods and services that are not specific to the tobacco business, but essential for any business, such as office equipment etc.

As a responsible business, we want to understand and continuously address potential sustainability issues in our global supply chain. We are working with business partners to proactively identify, manage, and reduce risks, and create shared value. The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2020 and 2021 Proxy Statement dated March 25, 2021, filed with the U.S. Securities and Exchange Commission, and the full text of PMI's Integrated Report 2020.

Remarks for this disclosure, in this submission:

- “PMI,” “we,” “us” and “our” refer to Philip Morris International Inc. and its subsidiaries;
- Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of PMI Inc. and are italicized;
- Expectations, aspirational targets and goals set forth in this submission do not constitute financial projections;
- Smoke-Free Products or Reduced-Risk Products (RRPs) - the terms PMI uses to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. PMI has a range of RRP's in various stages of development, scientific assessment and commercialization;
- Materiality: In this submission and in related communications, the terms “materiality,” “material” and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.
- Unless otherwise indicated, the scope of the data in this report covers our operations worldwide for the full calendar year 2020 or reflects the status as of December 31, 2020. Where not specified, data come from PMI estimates.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	28694000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	7181721090

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

S Group

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

391

Uncertainty (±%)

5

Major sources of emissions

Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 1 emissions 322,633 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 884 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

S Group

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

109

Uncertainty (±%)

5

Major sources of emissions

Electricity and district heating used in our factories and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 2 emissions 90,366 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 884 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

S Group

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

4348

Uncertainty (±%)

5

Major sources of emissions

Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,589,627 tCO₂e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 884 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

Kesko Corporation

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO₂e

441

Uncertainty (±%)

5

Major sources of emissions

Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 1 emissions 322,633 tCO₂e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 997 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

Kesko Corporation

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO₂e

123

Uncertainty (±%)

5

Major sources of emissions

Electricity and district heating used in our factories and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 2 emissions 90,366 tCO₂e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 997 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

Kesko Corporation

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

4905

Uncertainty (±%)

5

Major sources of emissions

Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,589,627 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 997 million equivalent cigarette units purchased by the customer in 2020.

Requesting member

Coop Danmark A/S

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

75

Uncertainty (±%)

5

Major sources of emissions

Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 1 emissions 322,633 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 170 million equivalent cigarette units and 10 million equivalent Heets units purchased by the customer in 2020.

Requesting member

Coop Danmark A/S

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

20

Uncertainty (±%)

5

Major sources of emissions

Electricity and district heating used in our factories and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 2 emissions 90,366 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 170 million equivalent cigarette units and 10 million equivalent Heets units purchased by the customer in 2020.

Requesting member

Coop Danmark A/S

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

841

Uncertainty (±%)

5

Major sources of emissions

Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,589,627 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 170 million equivalent cigarette units and 10 million equivalent Heets units purchased by the customer in 2020.

Requesting member

J Sainsbury Plc

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

185

Uncertainty (±%)

5

Major sources of emissions

Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 1 emissions 322,633 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 253.8 million equivalent cigarette units and 76.5 million equivalent Heets units purchased by the customer in 2020.

Requesting member

J Sainsbury Plc

Scope of emissions

Scope 2

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

56

Uncertainty (±%)

5

Major sources of emissions

Electricity and district heating used in our factories and offices.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 2 emissions 90,366 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 253.8 million equivalent cigarette units and 76.5 million equivalent Heets units purchased by the customer in 2020.

Requesting member

J Sainsbury Plc

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

2030

Uncertainty (±%)

5

Major sources of emissions

Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified

No

Allocation method

Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,589,627 tCO2e and the total annual volume sold 730,000 (654,000 combustible and 76,000 smoke-free products) million equivalent cigarettes sold and 253.8 million equivalent cigarette units and 76.5 million equivalent Heets units purchased by the customer in 2020.

SC1.2**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

The best source of all our environmental information is our CDP climate response or in PMI 2019's Integrated Report that can be downloaded from our website: [PMIs 2020 Integrated Report shows progress toward accelerating the end of smoking | PMI](#) (www.pmi.com/media-center/news/pmi-s-2020-integrated-report-shows-progress-toward-accelerating-the-end-of-smoking#:~:text=Our%20Integrated%20Report%202020%20demonstrates%20how%20our%20company's,Tier%201%20topics%20from%20PMI's%20sustainability%20materiality%20assessment.)

SC1.3**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	We would need detailed bill of materials and emissions per SKU and volumes purchased by each customer
We face no challenges	Extrapolating customer allocation on volume based is not an exercise that require too many complicated information and has proved efficient to provide the right level of information to clients that were requesting inputs for their indirect emissions.

SC1.4**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

SC1.4a**(SC1.4a) Describe how you plan to develop your capabilities.**

We have internal capabilities to allocate emissions to customers. If more customers request more information, we will develop dedicated tools to answer to them managing the complexity of our product lines and accounting for the different input values that define the carbon footprint of our conventional products versus our reduced risk products such as heat not burn products.

SC2.1**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

Requesting member

S Group

Group type of project

Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints.)

Type of project

Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted

Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized

Other, please specify (ongoing)

Estimated lifetime CO2e savings

0

Estimated payback

Cost/saving neutral

Details of proposal

We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member

Kesko Corporation

Group type of project

Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project

Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted

Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized

Other, please specify (ongoing)

Estimated lifetime CO2e savings

0

Estimated payback

Cost/saving neutral

Details of proposal

We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member

Coop Danmark A/S

Group type of project

Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project

Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted

Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized

Other, please specify (ongoing)

Estimated lifetime CO2e savings

0

Estimated payback

Cost/saving neutral

Details of proposal

We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member

J Sainsbury Plc

Group type of project

Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project

Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted

Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized

Other, please specify (ongoing)

Estimated lifetime CO2e savings

0

Estimated payback

Cost/saving neutral

Details of proposal

We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms